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NEWS	3	JAN 25	Annual Reload of MEDLINE database
NEWS	4	FEB 16	STN Express Maintenance Release, Version 8.4.2, Is Now Available for Download
NEWS	5	FEB 16	Derwent World Patents Index (DWPI) Revises Indexing of Author Abstracts
NEWS	6	FEB 16	New FASTA Display Formats Added to USGENE and PCTGEN
NEWS	7	FEB 16	INPADOCDB and INPAFAMDB Enriched with New Content and Features
NEWS	8	FEB 16	INSPEC Adding Its Own IPC codes and Author's E-mail Addresses
NEWS	9	APR 02	CAS Registry Number Crossover Limits Increased to 500,000 in Key STN Databases
NEWS	10	APR 02	PATDPAFULL: Application and priority number formats enhanced
NEWS	11	APR 02	DWPI: New display format ALLSTR available
NEWS	12	APR 02	New Thesaurus Added to Derwent Databases for Smooth Sailing through U.S. Patent Codes
NEWS	13	APR 02	EMBASE Adds Unique Records from MEDLINE, Expanding Coverage back to 1948
NEWS	14	APR 07	CA/CAplus CLASS Display Streamlined with Removal of Pre-IPC 8 Data Fields
NEWS	15	APR 07	50,000 World Traditional Medicine (WTM) Patents Now Available in CAplus
NEWS	16	APR 07	MEDLINE Coverage Is Extended Back to 1947

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2,
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FILE 'HOME' ENTERED AT 17:13:39 ON 04 MAY 2010

=> FILE REG
COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION
FULL ESTIMATED COST | 0.22 | 0.22

FILE 'REGISTRY' ENTERED AT 17:14:20 ON 04 MAY 2010

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 3 MAY 2010 HIGHEST RN 1221227-20-8
DICTIONARY FILE UPDATES: 3 MAY 2010 HIGHEST RN 1221227-20-8

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TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

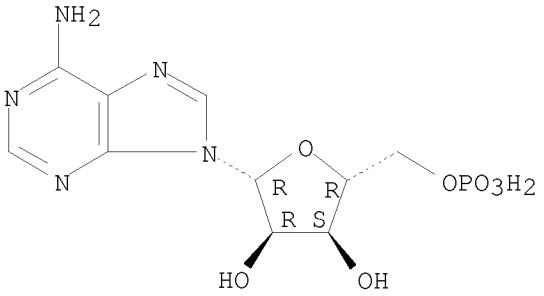
=> S 61-19-8/RN
L1 1 61-19-8/RN

=> D L1

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2010 ACS on STN
RN 61-19-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN 5'-Adenylic acid (CA INDEX NAME)
OTHER NAMES:
CN 5'-AMP
CN Adenosine 5'-(dihydrogen phosphate)
CN Adenosine 5'-monophosphate
CN Adenosine 5'-phosphate
CN Adenosine 5'-phosphoric acid
CN Adenosine monophosphate
CN Adenosine phosphate
CN Adenosine-5'-monophosphoric acid
CN Adenosine-5-monophosphoric acid
CN Adenovite
CN Adenylic acid
CN AMP
CN AMP (nucleotide)
CN Cardiomone
CN Lycedan
CN My-B-Den
CN NSC 20264
CN Phosaden
CN Phosphaden
CN Phosphentaside

FS   STEREOSEARCH
DR   697214-87-2, 162756-82-3, 53624-78-5, 67583-85-1, 47286-65-7, 47287-97-8
MF   C10 H14 N5 O7 P
CI   COM
LC   STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
       BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN,
       CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, HSDB*, IFICDB,
       IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PIRA, PROMT,
       RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, USPATOLD
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**, WHO
         (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

           19627 REFERENCES IN FILE CA (1907 TO DATE)
             651 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
           19647 REFERENCES IN FILE CAPLUS (1907 TO DATE)

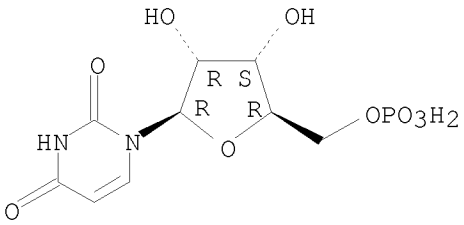
=> S 58-97-9/RN
L2   1 58-97-9/RN

=> D L2

L2   ANSWER 1 OF 1 REGISTRY COPYRIGHT 2010 ACS on STN
RN   58-97-9 REGISTRY
ED   Entered STN: 16 Nov 1984
CN   5'-Uridylic acid (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Uridylic acid (6CI)
OTHER NAMES:
CN   5'-UMP
CN   UMP
CN   UMP (nucleic acid)
CN   Uridine 5'-(dihydrogen phosphate)
CN   Uridine 5'-monophosphate
CN   Uridine 5'-phosphate
CN   Uridine 5'-phosphoric acid
CN   Uridine monophosphate
CN   Uridine phosphate
CN   Uridine, 5'-(dihydrogen phosphate)
CN   Uridine, mono(dihydrogen phosphate) (ester)
FS   STEREOSEARCH
DR   53624-79-6, 81795-92-8
MF   C9 H13 N2 O9 P
CI   COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4081 REFERENCES IN FILE CA (1907 TO DATE)
192 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4087 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FILE MEDICINE
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	4.69	4.91

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FILE 'DRUGMONOG2' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'DRUGU' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'EMBAL' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'EMBASE' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'ESBIOBASE' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'IFIPAT' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'IMSDRUGNEWS' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'IMSPRODUCT' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'IPA' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'KOSMET' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'LIFESCI' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'MEDLINE' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'NAPRALERT' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'NLDB' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'PASCAL' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'PCTGEN' ENTERED AT 17:14:50 ON 04 MAY 2010

FILE 'SCISEARCH' ENTERED AT 17:14:50 ON 04 MAY 2010

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FILE 'TOXCENTER' ENTERED AT 17:14:50 ON 04 MAY 2010
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FILE 'USGENE' ENTERED AT 17:14:50 ON 04 MAY 2010
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FILE 'USPATFULL' ENTERED AT 17:14:50 ON 04 MAY 2010
CA INDEXING COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATOLD' ENTERED AT 17:14:50 ON 04 MAY 2010
CA INDEXING COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 17:14:50 ON 04 MAY 2010
CA INDEXING COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

=> S (L1) and (skin or topical or cosmetic or dermatological)
'RN' IS NOT A VALID FIELD CODE
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L3         928 (L1) AND (SKIN OR TOPICAL OR COSMETIC OR DERMATOLOGICAL)

=> S L3 and py<2002
'2002' NOT A VALID FIELD CODE
  15 FILES SEARCHED...
  25 FILES SEARCHED...
L4         525 L3 AND PY<2002

=> DUP REM L4
DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2,
IMSPRODUCT, KOSMET, PCTGEN, USGENE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L4
L5          358 DUP REM L4 (167 DUPLICATES REMOVED)

=> S L1 and (skin or topical or cosmetic or dermatological)/AB
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'AB' IS NOT A VALID FIELD CODE
'RN' IS NOT A VALID FIELD CODE
  27 FILES SEARCHED...
'RN' IS NOT A VALID FIELD CODE
L6   497 L1 AND (SKIN OR TOPICAL OR COSMETIC OR DERMATOLOGICAL)/AB

=> S L6 and py<2002
'2002' NOT A VALID FIELD CODE
  15 FILES SEARCHED...
  25 FILES SEARCHED...
L7   339 L6 AND PY<2002

=> DUP REM L7
DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2,
IMSPRODUCT, KOSMET, PCTGEN, USGENE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L7
L8   221 DUP REM L7 (118 DUPLICATES REMOVED)

=> D 1-221 IBIb ABS

L8   ANSWER 1 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2001:823101 CAPLUS
DOCUMENT NUMBER: 135:343716
TITLE: Immunostimulant compositions containing nucleic acids
                         useful for foods and beverages
INVENTOR(S):   Nagafuchi, Shinya; Takahashi, Takeshi; Totsuka,
                         Mamoru; Hachimura, Satoshi; Yajima, Koji; Kuwata,
                         Tamotsu; Uenogawa, Shuichi
PATENT ASSIGNEE(S):   Meiji Milk Products, Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
                         CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

     PATENT NO.   KIND   DATE   APPLICATION NO.   DATE
     ---------------   ----   --------   --------------------   --------
     JP 2001314172   A   20011113   JP 2000-131406   20000428 <--
     JP 4010390   B2   20071121
PRIORITY APPLN. INFO.:   JP 1999-266139   A 19990920
                                            JP 2000-57507   A 20000302
AB   Immunostimulant compns. contain nucleic acid compns. as active
     ingredients. Oral intake of the compns. increases the ratios of
     intestinal intraepithelial TCR$\gamma\delta$+ T lymphocyte subsets,
     enhances production of IFN-γ, IL-2, IL-7, and TGF-β in small
     intestinal epithelial cells and production of IL-12 in macrophages and
     splenocytes, and induces antigen-specific IgA antibodies. Formulation

examples are given for infant formula, tablets, infusions, milk, cosmetics, and ointments containing nucleic acids, nucleotides, nucleosides, and/or nucleic acid bases.
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 2 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2000:585381 CAPLUS
DOCUMENT NUMBER: 133:182770
TITLE: Antiaging cosmetics containing tomato pigments
INVENTOR(S): Uehara, Shizuka; Kameyama, Kumi; Kondo, Chiharu; Takada, Norihisa
PATENT ASSIGNEE(S): Kosei Co., Ltd., Japan; Nippon Delmonte K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000229827	A	20000822	JP 1999-28301	19990205 <--

PRIORITY APPLN. INFO.: JP 1999-28301 19990205
AB The cosmetics are claimed. The tomato pigments may mainly comprise lycopene isolated by centrifugation of tomato prepns., microfiltration of the liquid parts, and collection of unfiltered substances by microfiltration. The cosmetics may addnl. contain active oxygen scavengers, antioxidants, inflammation inhibitors, UV shields, cell activators, and/or moisturizers. A cream containing the tomato pigment was used by volunteers to lighten skin and increase elasticity.
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L8 ANSWER 3 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:401602 CAPLUS
DOCUMENT NUMBER: 133:34318
TITLE: Deodorant cosmetic composition comprising an amino acid transforming enzyme inhibitor
INVENTOR(S): Forestier, Serge; Courbiere, Christophe
PATENT ASSIGNEE(S): L'Oreal, Fr.
SOURCE: PCT Int. Appl., 11 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000033787	A2	20000615	WO 1999-FR2887	19991123 <--
WO 2000033787	A3	20001019		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2786690	A1	20000609	FR 1998-15477	19981208 <--
CA 2353721	A1	20000615	CA 1999-2353721	19991123 <--

AU 2000012795	A	20000626	AU 2000-12795		19991123 <--
EP 1137393	A2	20011004	EP 1999-956129		19991123 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
ZA 200104481	A	20020116	ZA 2001-4481		19991123
BR 9916947	A	20020219	BR 1999-16947		19991123
JP 2002531474	T	20020924	JP 2000-586282		19991123
PRIORITY APPLN. INFO.:			FR 1998-15477	A	19981208
			WO 1999-FR2887	W	19991123

AB The invention concerns a deodorant cosmetic composition comprising at least a selected amino acid transforming enzyme inhibitor, the use of said compns. for topical application for humans and the use of a selected amino acid transforming enzyme inhibitor as active deodorant. A lotion contained D-cycloserine 2.0, triethanolamine q.s. pH = 7.5, perfumes q.s., and water q.s. 100 g.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:271979 CAPLUS

DOCUMENT NUMBER: 132:283941

TITLE: Rough skin-preventing and antiaging cosmetics

INVENTOR(S): Uehara, Shizuka; Asano, Kae

PATENT ASSIGNEE(S): Kosei Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000119155	A	20000425	JP 1998-291790	19981014 <--
PRIORITY APPLN. INFO.:			JP 1998-291790	19981014

AB Rough skin-preventing and antiaging cosmetics comprise: (A) exts. of plants such as water caltrop, carrot, Althaea, Arnica montana, aloe, Matricaria chamomilla, Artemisia vulgaris indica, kiwi, cucumber, honeysuckle, grape, comfrey, white birch, cedar, salvia and mulberry, (B) moisturizers and/or cell activators, and (C) vitamins, glycyrrhetic acid, glycyrrhizinic acid and/or their derivs. A lotion contained glycerin 7, 1,3-butylene glycol 3.5, polyethylene sorbitan monolaurate 1.2, ethanol 7, white birch extract 1, madonie extract 1, dl-α-tocopherol acetate 1, L-serine 0.3, Bifidobacterium extract 2.0, preservatives, perfumes and purified water to 100%.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L8 ANSWER 5 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 3

ACCESSION NUMBER: 2000:509117 BIOSIS

DOCUMENT NUMBER: PREV200000509117

TITLE: Antiasthmatic effects of mediator blockade versus topical corticosteroids in allergic rhinitis and asthma.

AUTHOR(S): Wilson, Andrew M.; Orr, Linda C.; Sims, Erika J.; Dempsey, Owen J.; Lipworth, Brian J. [Reprint author]

CORPORATE SOURCE: Asthma and Allergy Research Group, Department of Clinical Pharmacology and Therapeutics, Ninewells Hospital and Medical School, University of Dundee, Dundee, DD1 9SY, UK

SOURCE: American Journal of Respiratory and Critical Care Medicine,

(October, 2000) Vol. 162, No. 4 Part 1, pp. 1297-1301. print.
ISSN: 1073-449X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 22 Nov 2000
Last Updated on STN: 11 Jan 2002

AB To compare the antiasthmatic efficacy of inflammatory mediator blockade versus topical corticosteroid therapy in patients with seasonal allergic rhinitis (SAR) and asthma, 14 patients were enrolled into a single-blind, double-dummy, placebo-controlled crossover study comparing 2 wk therapy of (1) 400 mug orally inhaled budesonide plus 200 mug intranasal budesonide (BUD) or (2) 10 mg oral montelukast plus 10 mg oral cetirizine (ML + CZ). Before each treatment period, patients received 7 to 10 d placebo washout. All treatments were given once daily in the morning. Throughout the study, patients recorded the following domiciliary measures: peak expiratory flow (PEF), rescue inhaler requirement, asthma symptoms, and daily activity score. Laboratory measurements were made at trough of adenosine monophosphate (AMP) bronchial challenge and exhaled nitric oxide (NO). Compared with pooled placebo (PL), there were significant ($p < 0.05$) improvements in all domiciliary measures with both treatments (mean PEF (L/min) PL: 463; BUD: 478, ML + CZ: 483). For geometric mean AMP PC20 (mg/ml), there was an improvement ($p < 0.05$), compared with PL (47), for ML + CZ (133) but not for BUD (51); whereas for NO (ppb) there was significant suppression with BUD (7.6) but not ML + CZ (11.5) compared with PL (13.6). In conclusion, both combined mediator blockade and combined topical corticosteroids are equally effective antiasthma therapy in patients with asthma and SAR.

L8 ANSWER 6 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 4
ACCESSION NUMBER: 2001:133421 BIOSIS
DOCUMENT NUMBER: PREV200100133421
TITLE: Metabolic fate of extracellular NAD in human skin fibroblasts.
AUTHOR(S): Aleo, Maria Francesca [Reprint author]; Giudici, Maria Luisa; Sestini, Silvia; Danesi, Paola; Pompucci, Giuseppe; Preti, Augusto
CORPORATE SOURCE: Sezione di Biochimica, Dipartimento di Scienze Biomediche e Biotecnologie, Universita Degli Studi di Brescia, Via Valsabbina, 19, 25123, Brescia, Italy
aleo@med.unibs.it
SOURCE: Journal of Cellular Biochemistry, (27 November-21 December, 2000) Vol. 80, No. 3, pp. 360-366. print.
CODEN: JCEBD5. ISSN: 0730-2312.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 14 Mar 2001
Last Updated on STN: 15 Feb 2002

AB Extracellular NAD is degraded to pyridine and purine metabolites by different types of surface-located enzymes which are expressed differently on the plasmamembrane of various human cells and tissues. In a previous report, we demonstrated that NAD-glycohydrolase, nucleotide pyrophosphatase and 5'-nucleotidase are located on the outer surface of human skin fibroblasts. Nucleotide pyrophosphatase cleaves NAD to nicotinamide mononucleotide and AMP, and 5'-nucleotidase hydrolyses AMP to adenosine. Cells incubated with NAD, produce nicotinamide, nicotinamide mononucleotide, hypoxanthine and adenine. The absence of ADPribose and adenosine in the extracellular compartment could be due to further catabolism and/or uptake of these products. To clarify the fate of the purine moiety of exogenous NAD, we investigated uptake of the

products of NAD hydrolysis using U-(14C)-adenine-NAD. ATP was found to be the main labeled intracellular product of exogenous NAD catabolism; ADP, AMP, inosine and adenosine were also detected but in small quantities. Addition of ADPribose or adenosine to the incubation medium decreased uptake of radioactive purine, which, on the contrary, was unaffected by addition of inosine. ADPribose strongly inhibited the activity of ecto-NAD-hydrolyzing enzymes, whereas adenosine did not. Radioactive uptake by purine drastically dropped in fibroblasts incubated with 14C-NAD and dipyridamole, an inhibitor of adenosine transport. Partial inhibition of (14C)-NAD uptake observed in fibroblasts depleted of ATP showed that the transport system requires ATP to some extent. All these findings suggest that adenosine is the purine form taken up by cells, and this hypothesis was confirmed incubating cultured fibroblasts with 14C-adenosine and analyzing nucleoside uptake and intracellular metabolism under different experimental conditions. Fibroblasts incubated with (14C)-adenosine yield the same radioactive products as with (14C)-NAD; the absence of inhibition of (14C)-adenosine uptake by ADPribose in the presence of alpha-beta methyleneADP, an inhibitor of 5' nucleotidase, demonstrates that ADPribose coming from NAD via NAD-glycohydrolase is finally catabolised to adenosine. These results confirm that adenosine is the NAD hydrolysis product incorporated by cells and further metabolized to ATP, and that adenosine transport is partially ATP dependent.

L8 ANSWER 7 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 5

ACCESSION NUMBER: 2000:89033 BIOSIS
DOCUMENT NUMBER: PREV200000089033
TITLE: Evidence for P2Y-type ATP receptors on the serosal membrane of frog skin epithelium.
AUTHOR(S): Brodin, Birger [Reprint author]; Nielsen, Robert
CORPORATE SOURCE: Department of Pharmaceutics, Royal Danish School of Pharmacy, Universitetsparken 2, DK-2100, Copenhagen, Denmark
SOURCE: Pfluegers Archiv European Journal of Physiology, (Jan., 2000) Vol. 439, No. 3, pp. 234-239. print. CODEN: PFLABK. ISSN: 0031-6768.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 10 Mar 2000
Last Updated on STN: 3 Jan 2002

AB The present study presents the first evidence for P2Y-type adenosine 5'-triphosphate (ATP) receptors on the basolateral membranes of frog skin epithelial cells. Cytosolic calcium ((Ca2+)i) was measured with fura-2 and Calcium-Green-1 using epifluorescence microscopy and confocal laser scanning microscopy respectively. In the presence of Ca2+ in the solutions ATP increased (Ca2+)i. The increase in (Ca2+)i was due to the agonist activity of ATP and not to the activity of the potential products of ATP metabolism, i.e. adenosine 5'-di-phosphate (ADP), adenosine 5'-monophosphate (AMP) or adenosine, as shown by a comparison of the magnitude of the increases in (Ca2+)i caused by the various compounds. The rise in (Ca2+)i was predominantly monophasic at low ATP concentrations (below 100 muM). At higher concentrations the initial spike was followed by a plateau phase. In the absence of Ca2+ in the extracellular solution ATP caused Ca2+ release from intracellular stores. This could be inhibited by pre-treatment of the tissue with 1 muM thapsigargin, an inhibitor of the endoplasmic reticulum calcium ATPase. The nucleotide uridine 5'-triphosphate (UTP) had similar effects on (Ca2+)i although the plateau level of the (Ca2+)i response was higher with this P2Y agonist. Confocal laser scanning microscopy showed that all cell layers of the epithelium responded to ATP. Our data indicates that serosal ATP acts on serosal P2Y-type receptors in frog skin epithelium. This is the first evidence of a phospholipase C-coupled receptor in this tissue.

L8 ANSWER 8 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 6
ACCESSION NUMBER: 2000:268054 CAPLUS
DOCUMENT NUMBER: 133:40690
TITLE: Adenosine, AMP, and protein phosphatase activity in sandfly saliva
AUTHOR(S): Katz, Oren; Waitumbi, John N.; Zer, Ronnie; Warburg, Alon
CORPORATE SOURCE: Department of Parasitology, The Hebrew University-Hadassah Medical School, Jerusalem, Israel
SOURCE: American Journal of Tropical Medicine and Hygiene (2000), 62(1), 145-150
CODEN: AJTHAB; ISSN: 0002-9637
PUBLISHER: American Society of Tropical Medicine and Hygiene
DOCUMENT TYPE: Journal
LANGUAGE: English
AB As they probe the skin for blood, sand flies inject saliva that prevents hemostasis. Sand fly saliva also promotes leishmaniasis by suppressing immunol. functions of macrophages. Saliva of Phlebotomus papatasi, the vector of Old World cutaneous leishmaniasis, contains adenosine and AMP. We show that P. papatasi saliva as well as pure adenosine down-regulate the expression of the inducible nitric oxide (NO) synthase gene in activated macrophages. In addition P. papatasi, but not Lutzomyia longipalpis, saliva inhibits the production of NO. Taken together, these data suggest that salivary adenosine is responsible for the down-regulation of NO synthesis. Saliva of both genera Phlebotomus and Lutzomyia contains significant levels of endogenous protein phosphatase-1/2A-like activity that is heat labile, inhibitable by okadaic acid and calyculin a, and does not require divalent cations.
OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 7
ACCESSION NUMBER: 2001:327835 CAPLUS
DOCUMENT NUMBER: 135:255587
TITLE: Adenylosuccinate lyase deficiency: From the clinics to molecular biology
AUTHOR(S): Marie, Sandrine; Race, Valerie; Vincent, M. Francoise; Van Den Berghe, Georges
CORPORATE SOURCE: Laboratory of Physiological Chemistry, Christian de Duve Institute of Cellular Pathology, Brussels, B-1200, Belg.
SOURCE: Advances in Experimental Medicine and Biology (2000), 486(Purine and Pyrimidine Metabolism in Man X), 79-82
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Kluwer Academic/Plenum Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To obtain a genotype-phenotype correlations in adenylosuccinate lyase (ADSL), seven mutated ADSL enzymes were expressed and their properties were compared with those of the fibroblast enzymes. A correlation of the patients' succinyladenosine/succinylaminoimidazolecarboxamide ribotide (SAICAR) ratios and mental status was also established. Nine independent patients with seven different mutations were investigated. Skin fibroblasts were cultured and their ADSL activities were assayed with SAICAR and AMP from adenylosuccinate (S-AMP) by measuring the formation of AICAR and AMP, resp., by HPLC. Six out of seven mutations could be similarly expressed as soluble, active thioredoxin (Trx)-ADSL and purified. One mutation, del 206-218, remained mostly insol., and was inactive.

Results indicated that the genetic lesions of ADSL dets. the ratio of its activities with S-AMP as compared to SAICAR, which in turn influence the S-Ado/SAICAriboside ratio, and hence the patients metal status.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 8

ACCESSION NUMBER: 2000:598305 CAPLUS

DOCUMENT NUMBER: 134:70558

TITLE: Toxicity and taste components of the puffer fish, Sphoeroides annulatus (bull's eye puffer), from Mexico

AUTHOR(S): Kim, Kyung-Sam; Kim, Dong-Soo

CORPORATE SOURCE: Dept. of Food Nutrition, Pusan Women's College, Pusan, 614-716, S. Korea

SOURCE: Han'guk Susan Hakhoechi (2000), 33(1), 75-78
CODEN: HSHKAW; ISSN: 0374-8111

PUBLISHER: Korean Fisheries Society

DOCUMENT TYPE: Journal

LANGUAGE: Korean

AB The toxicity and taste components of the puffer fish, Sphoeroides annulatus (bull's eye puffer), transported from Mexico was investigated. All other parts including muscle and skin were nontoxic ranging below 10 MU/g except gonad. The amts. of IMP and ADP were 5.6 μmol/g and 2.7 μmol/g, and the ratio to the total ATP and its related compds. was 41.1%. The great portion of free amino acids in the muscle of the puffer was occupied by L-glycine, L-alanine, L-anserine, L-threonine and L-valine. Their amts. were 233.5, 169.0, 149.1, 135.7 and 132.3 mg/100 g. Their concentration ratio to total free amino acids were 14.28, 10.33, 9.12, 8.30 and 8.09%, resp. The content was 50.12% of the total free amino acids. In addition, the amts. of taurine and L-histidine were 119.3 and 14.7 mg/100 g.

L8 ANSWER 11 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:708578 CAPLUS

DOCUMENT NUMBER: 131:314117

TITLE: Composition and method for increasing ATP levels in aging skin

INVENTOR(S): Mammone, Thomas; Collins, Donald F.

PATENT ASSIGNEE(S): Color Access, Inc., USA

SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9955302	A1	19991104	WO 1999-US8497	19990422 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2294482	A1	19991104	CA 1999-2294482	19990422 <--
CA 2294482	C	20070116		

AU 9937504	A	19991116	AU 1999-37504		19990422 <--
AU 744295	B2	20020221			
EP 1003473	A1	20000531	EP 1999-919884		19990422 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2001503447	T	20010313	JP 1999-554249		19990422 <--
PRIORITY APPLN. INFO.:			US 1998-67059	A	19980427
			WO 1999-US8497	W	19990422

AB A cosmetic or pharmaceutical topical composition for increasing the ATP levels in aging cells comprises applying to the skin an effective amount of ADP, AMP or oxaloacetic acid, or a combination thereof, with a cosmetically or pharmaceutically acceptable carrier. The compns. of the invention can be used to increase the energy level of cells, particularly skin cells, and to treat and prevent the symptoms of aging in the skin. Normal human dermal fibroblasts were treated for 2 h with ADP (0.01-1.00 mM), AMP (0.01-1.00 mM), and oxaloacetic acid (0.05-1.0 mM). ADP increased the ATP levels in fibroblasts in a dose dependent manner. AMP also increased the ATP levels in fibroblasts, but not to the same extent as ADP, and not in a dose dependent manner. The maximum increases achieved by ADP and AMP were 56% and 36% at 0.5 mM, resp. Oxaloacetic acid at all concns. increased ATP levels in treated cells, with a maximum increase of 55% at 0.1 mM.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1999:81290 CAPLUS
DOCUMENT NUMBER: 130:200748
TITLE: Skin cosmetics
INVENTOR(S): Hasunuma, Kyotaro; Hanaoka, Hidenori; Morita, Kazuyoshi
PATENT ASSIGNEE(S): Kanebo, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11029457	A	19990202	JP 1997-179654	19970704 <--
PRIORITY APPLN. INFO.:			JP 1997-179654	19970704

AB Rough skin-preventing and antiaging cosmetics comprise L-carnitine salts and/or adenosine phosphates such as adenosine-3',5'-cyclic phosphate, AMP sodium salt and ATP sodium salt. A skin lotion contained olive oil 15, iso-Pr myristate 5, polyoxyethylene nonylphenyl ether 0.5, L-carnitine-HCl 1.0, adenosine-3',5'-cyclic phosphate 0.5, glycerin 5.0, methylparaben 0.1, ethanol 7.0 and purified water to 100 weight%.

L8 ANSWER 13 OF 221 MEDLINE on STN
ACCESSION NUMBER: 1999340084 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10409702
TITLE: Expression of human fibroblast growth factor 2 mRNA is post-transcriptionally controlled by a unique destabilizing element present in the 3'-untranslated region between alternative polyadenylation sites.
AUTHOR: Touriol C; Morillon A; Gensac M C; Prats H; Prats A C
CORPORATE SOURCE: INSERM U397, Endocrinologie et Communication Cellulaire, Institut Louis Bugnard, Centre Hospitalier Universitaire de Rangueil, Avenue Jean Poulhes, 31403 Toulouse Cedex 04,

France.
SOURCE: The Journal of biological chemistry, (1999 Jul 23) Vol. 274, No. 30, pp. 21402-8.
Journal code: 2985121R. ISSN: 0021-9258. L-ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199908
ENTRY DATE: Entered STN: 10 Sep 1999
Last Updated on STN: 10 Sep 1999
Entered Medline: 26 Aug 1999

AB Fibroblast growth factor 2 (FGF-2) belongs to a family of 18 genes coding for either mitogenic differentiating factors or oncogenic proteins, the expression of which must be tightly controlled. We looked for regulatory elements in the 5823-nucleotide-long 3'-untranslated region of the FGF-2 mRNA that contains eight potential alternative polyadenylation sites. Quantitative reverse transcription-polymerase chain reaction revealed that poly(A) site utilization was cell type-dependent, with the eighth poly(A) site being used (95%) in primary human skin fibroblasts, whereas proximal sites were used in the transformed cell lines studied here. We used a cell transfection approach with synthetic reporter mRNAs to localize a destabilizing element between the first and second poly(A) sites. Although AU-rich, the FGF-2-destabilizing element had unique features: it involved a 122-nucleotide direct repeat, with both elements of the repeat being required for the destabilizing activity. These data show that short stable FGF-2 mRNAs are present in transformed cells, whereas skin fibroblasts contain mostly long unstable mRNAs, suggesting that FGF-2 mRNA stability cannot be regulated in transformed cells. The results also provide evidence of a multilevel post-transcriptional control of FGF-2 expression; such a stringent control prevents FGF-2 overexpression and permits its expression to be enhanced only in relevant physiological situations.

L8 ANSWER 14 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1999:197725 CAPLUS
DOCUMENT NUMBER: 131:78223
TITLE: List of drug products that have been withdrawn or removed from the market for reasons of safety or effectiveness
CORPORATE SOURCE: Food and Drug Administration, HHS, Center for Drug Evaluation and Research (HFD-7), Food and Drug Administration, Rockville, MD, 20857, USA
SOURCE: Federal Register (1999), 64(44), 10944-10947 , 8 Mar 1999
CODEN: FEREAC; ISSN: 0097-6326
PUBLISHER: Superintendent of Documents
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The Food and Drug Administration (FDA) is amending its regulations to include a list of drug products that may not be used for pharmacy compounding under the exemptions under section 503A of the Federal Food, Drug, and Cosmetic Act because they have had their approval withdrawn or were removed from the market because the drug product or its components have been found to be unsafe or not effective. The list has been compiled under the new statutory requirements of the Food and Drug Administration Modernization Act of 1997 (Modernization Act).

L8 ANSWER 15 OF 221 MEDLINE on STN DUPLICATE 9
ACCESSION NUMBER: 2000041631 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10576212

TITLE: Sequence-specific inhibition of gene expression in intact human skin by epicutaneous application of chimeric antisense oligodeoxynucleotides.
AUTHOR: Wingens M; Pfundt R; van Vlijmen-Willems I M; van Hooijdonk C A; van Erp P E; Schalkwijk J
CORPORATE SOURCE: Department of Dermatology, University Hospital Nijmegen, The Netherlands.. m.wingens@derma.azn.nl
SOURCE: Laboratory investigation; a journal of technical methods and pathology, (1999 Nov) Vol. 79, No. 11, pp. 1415-24.
Journal code: 0376617. ISSN: 0023-6837. L-ISSN: 0023-6837.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199912
ENTRY DATE: Entered STN: 13 Jan 2000
Last Updated on STN: 13 Jan 2000
Entered Medline: 7 Dec 1999

AB Targeted and selective inhibition of keratinocyte gene expression in human epidermis could be an efficient and safe pharmacologic approach in many skin diseases. In this study we investigated whether topical application of antisense oligodeoxynucleotides (ODN) on intact human skin can be used to inhibit expression of a gene in the differentiated compartment of the epidermis. We applied a variety of 20-mer antisense and control ODN designed to hybridize to different regions on the mRNA of the inducible epidermal proteinase inhibitor skin-derived antileukoproteinase (SKALP)/elafin that was used as a model target gene. When nuclease-resistant fully phosphorothioate ODN were applied to explant cultures of human skin, they were found to be either ineffective at low doses or severely toxic at higher doses which could be attributed to the extremely high degree of protein binding found with this type of ODN. When chimeric ODN with a phosphodiester core and phosphorothioate 5' and 3' ends were applied to intact skin, no toxicity was noted. One of the tested chimeric ODN, that exhibit only minor protein binding, was found to inhibit SKALP expression at the protein level in a dose-dependent manner. The observed inhibition on SKALP expression levels was specific as evaluated by application of strict criteria. Sequence specificity was assessed by the addition of sense and scrambled ODN which were ineffective. Furthermore the expression levels of three other differentiation-related genes (involucrin, cytokeratin 16, and secretory leukocyte proteinase inhibitor) were not affected, indicating that the inhibition was gene specific. Confocal laser scanning analysis of fluorescently labeled ODN confirmed that these molecules can easily penetrate the epidermis and localize in the cytoplasm of differentiated keratinocytes. We conclude that topical application of antisense ODN can be used to modulate epidermal gene expression, and could potentially be useful to inhibit expression of genes that are relevant in skin diseases.

L8 ANSWER 16 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1999:449325 BIOSIS
DOCUMENT NUMBER: PREV199900449325
TITLE: Utility of herbal topical gel in mastitis control and udder health improvement.
AUTHOR(S): Pradhan, N. R. [Reprint author]
CORPORATE SOURCE: Department of Clinics, Faculty of Veterinary and Animal Sciences, West Bengal University of Animal and Fishery Sciences, Calcutta, 700 037, India
SOURCE: Indian Veterinary Journal, (June, 1999) Vol. 76,

No. 6, pp. 546-548. print.
CODEN: IVEJAC. ISSN: 0019-6479.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Oct 1999
Last Updated on STN: 26 Oct 1999

AB A topical herbal gel AV/AMP/14 was evaluated by applying twice daily for 5 days on the udder and teats in the subclinical mastitis affected cows. Following treatment, the gel was found effective in correcting the SCM through reduced mean somatic cell counts and negative reaction to diagnostic test. The post-treatment milk yield was also found to improve. In the healthy lactating cows also, the gel was found useful protective application in preventing mastitis.

L8 ANSWER 17 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 10
ACCESSION NUMBER: 1998:527195 CAPLUS
DOCUMENT NUMBER: 129:144880
ORIGINAL REFERENCE NO.: 129:29424a
TITLE: P2 receptor agonists, antagonists and modulators of endogenous ATP release, and therapeutic use
INVENTOR(S): Gallagher, James Anthony; Bowler, Wayne Barry
PATENT ASSIGNEE(S): The University of Liverpool, UK
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9832429	A2	19980730	WO 1998-GB205	19980123 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9856747	A	19980818	AU 1998-56747	19980123 <--
PRIORITY APPLN. INFO.:			GB 1997-1374 A	19970123
			WO 1998-GB205 W	19980123

AB The invention relates to P2 agonists and antagonists or a compound which will stimulate or inhibit endogenous ATP (ATP) production, and more particularly to novel medical uses for same. More particularly still it relates to treating skin conditions characterized by hyperproliferation of keratinocytes, including for example, keloid formation, dermatitis and psoriasis or enhancing wound healing. The invention provides the use of an agonist or antagonist of a type P2-receptor or a compound which will stimulate or inhibit ATP (ATP) production for the manufacture of a medicament for treating wounds or skin conditions characterized by hyperproliferation of keratinocytes or acanthosis. It also provides a pharmaceutical composition comprising a growth factor, a pharmaceutically acceptable carrier and either an agonist of a P2Y receptor or a compound which will stimulate ATP (ATP) production
OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L8 ANSWER 18 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1998:438372 CAPLUS
DOCUMENT NUMBER: 129:99835

ORIGINAL REFERENCE NO.: 129:20459a,20462a
TITLE: skin cosmetics
INVENTOR(S): Takisada, Mikimasa; Sasaki, Ichiro; Seo, Masami
PATENT ASSIGNEE(S): Kosei Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10182412	A	19980707	JP 1996-357827	19961227 <--

PRIORITY APPLN. INFO.: JP 1996-357827 19961227
AB Skin cosmetics showing excellent moisturizing, rough skin-preventing and antiaging effects contain deep water and cell activators and/or moisturizers.
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L8 ANSWER 19 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1998:438371 CAPLUS
DOCUMENT NUMBER: 129:99834
ORIGINAL REFERENCE NO.: 129:20459a,20462a
TITLE: Skin cosmetics
INVENTOR(S): Hoshino, Taku; Sasaki, Ichiro; Senoo, Masami
PATENT ASSIGNEE(S): Kosei Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10182411	A	19980707	JP 1996-356996	19961226 <--

PRIORITY APPLN. INFO.: JP 1996-356996 19961226
AB Skin cosmetics showing rough skin -preventing, wound healing-promoting and antiaging effects contain alkaline pure spring water and cell activators.
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 20 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1998:226988 CAPLUS
DOCUMENT NUMBER: 128:312741
ORIGINAL REFERENCE NO.: 128:61897a,61900a
TITLE: cosmetics or external pharmaceutical compositions containing Acanthopanax gracilistylus extracts and other ingredients
INVENTOR(S): Kondo, Chiharu; Aneo, Masami
PATENT ASSIGNEE(S): Kosei Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 10095704	A	19980414	JP 1996-269316	19960919 <--
JP 3507635	B2	20040315		

PRIORITY APPLN. INFO.: JP 1996-269316 19960919

AB Cosmetics [lotions, emulsions, creams] or external pharmaceutical compns. [ointments] contain A. gracilistylus exts. and tyrosinase inhibitors, cell activators, antiinflammatories and/or moisturizers.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 21 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:41974 CAPLUS
DOCUMENT NUMBER: 128:106245
ORIGINAL REFERENCE NO.: 128:20735a,20738a
TITLE: Skin-lightening and antiaging cosmetics
INVENTOR(S): Seiki, Hitoshi; Okano, Yuri
PATENT ASSIGNEE(S): NOEVIR Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10007541	A	19980113	JP 1996-181321	19960620 <--

PRIORITY APPLN. INFO.: JP 1996-181321 19960620

AB Skin-lightening and antiaging cosmetics comprise: (A) lipoic acid and (B) compds. selected from vitamin A or its derivs., carotenes, riboflavin or its derivs., vitamin B6 or its salts or derivs., cobalamins, vitamin C or its salts or derivs., vitamin E or its derivs., vitamin K, adenosine or its derivs., flavonoids and tannins, in addition to other ingredients.

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L8 ANSWER 22 OF 221 TOXCENTER COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:233267 TOXCENTER
COPYRIGHT: Copyright 2010 ACS
DOCUMENT NUMBER: CA12825312741X
TITLE: cosmetics or external pharmaceutical compositions containing Acanthopanax gracilistylus extracts and other ingredients
AUTHOR(S): Kondo, Chiharu; Aneo, Masami
CORPORATE SOURCE: ASSIGNEE: Kosei Co., Ltd.
PATENT INFORMATION: JP 9895704 A 14 Apr 1998
SOURCE: (1998) Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF.
COUNTRY: JAPAN
DOCUMENT TYPE: Patent
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 1998:226988
LANGUAGE: Japanese
ENTRY DATE: Entered STN: May 2009
Last Updated on STN: May 2009

AB Cosmetics [lotions, emulsions, creams] or external pharmaceutical compns. [ointments] contain A. gracilistylus exts. and tyrosinase inhibitors, cell activators, antiinflammatories and/or moisturizers.

L8 ANSWER 23 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1998:224753 BIOSIS
DOCUMENT NUMBER: PREV199800224753
TITLE: Human TIMP-3 is expressed during fetal development, hair growth cycle, and cancer progression.
AUTHOR(S): Airola, Kirstina; Ahonen, Matti; Johansson, Ina; Heikkile, Paivi; Kere, Juha; Kahari, Veli-Matti; Saarialho-Kere, Ulpu K. [Reprint author]
CORPORATE SOURCE: Dep. Dermatol., Helsinki U. Central Hosp., Meilahdentie 2, 00250 Helsinki, Finland
SOURCE: Journal of Histochemistry and Cytochemistry, (April, 1998) Vol. 46, No. 4, pp. 437-447. print.
CODEN: JHCYAS. ISSN: 0022-1554.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 20 May 1998
Last Updated on STN: 20 May 1998
AB We studied the expression and regulation of TIMP-3, a recently cloned member of the tissue inhibitor of the metalloproteinase family, during human fetal development and in various human tissues, with emphasis on epithelial structures. Expression of TIMP-3 mRNA was detected by in situ hybridization in developing bone, kidney, and various mesenchymal structures. At 16 weeks of gestation, ectoderm-derived cells of hair germs expressed TIMP-3 mRNA, and beginning from the twentieth week consistent expression was detected in epithelial outer root sheath cells of growing hair follicles. In normal adult human skin, expression of TIMP-3 mRNA was limited to hair follicles, starting at the early anagen (growing) phase and vanishing at the catagen (regressing) phase. TIMP-3 mRNA was not detected in benign hair follicle-derived tumors but was present in tumor cells of infiltrative basal cell carcinomas and in surrounding stromal cells in squamous cell carcinomas. Human primary keratinocytes in culture expressed TIMP-3 mRNAs, the levels of which were upregulated by transforming growth factor-beta (TGF-beta), whereas interleukin-1beta (IL-1beta) and tumor necrosis factor-alpha (TNF-alpha) had no effect. Our results suggest a role for TIMP-3 in connective tissue remodeling during fetal development, hair growth cycle, and cancer progression.

L8 ANSWER 24 OF 221 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1999189832 EMBASE
TITLE: Congenital erythropoietic porphyria.
AUTHOR: Fritsch, C., Dr. (correspondence); Lang, K.; Bolsen, K.; Lehmann, P.; Ruzicka, T.
CORPORATE SOURCE: Department of Dermatology, Heinrich Heine University, Moorenstrasse 5, D-40225 Dusseldorf, Germany.
SOURCE: Skin Pharmacology and Applied Skin Physiology, (1998) Vol. 11, No. 6, pp. 347-357.
Refs: 20
ISSN: 1422-2868 CODEN: SPAPFF
COUNTRY: Switzerland
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 013 Dermatology and Venereology
022 Human Genetics
025 Hematology
029 Clinical and Experimental Biochemistry
037 Drug Literature Index
005 General Pathology and Pathological Anatomy
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 17 Jun 1999

Last Updated on STN: 17 Jun 1999

AB Congenital erythropoietic porphyria (CEP) is one of the rarest autosomal-recessive disorders of the porphyrin metabolism caused by the homozygous defect of uroporphyrinogen III cosynthase. High amounts of uroporphyrin I accumulate in all cells and tissues, reflected by an increased erythrocyte porphyrin concentration and excretion of high porphyrin amounts in urine and feces. Dermal deposits of uroporphyrin frequently induce a dramatic phototoxic oxygen-dependent skin damage with extensive ulcerations and mutilations. Splenomegaly and hemolytic anemia are typical internal symptoms. Skeletal changes such as osteolysis and calcifications are frequent. Up to date 130 cases of CEP have been published. Splenectomy and erythrocyte transfusions showed some beneficial effect. Bone marrow transplantation was performed in 3 patients and stem cell transplantation in 1. The best therapy is the avoidance of sunlight. We give a report on our latest cases of CEP.

L8 ANSWER 25 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1998:258673 BIOSIS
DOCUMENT NUMBER: PREV199800258673
TITLE: Purine metabolism in psoriasis.
AUTHOR(S): Tikhonov, Yu. V. [Reprint author]; Markusheva, L. I.; Toguzov, R. T.
CORPORATE SOURCE: Russ. State Med. Univ., Moscow, Russia
SOURCE: Klinicheskaya Laboratornaya Diagnostika, (March, 1998) Vol. 0, No. 3, pp. 3-6. print.
ISSN: 0869-2084.
DOCUMENT TYPE: Article
LANGUAGE: Russian
ENTRY DATE: Entered STN: 9 Jun 1998
Last Updated on STN: 12 Aug 1998

AB The pool of free purine derivatives and activities of the key enzymes of purine metabolism (adenosine deaminase, purine nucleoside phosphorylase, and 5'-nucleotidase) in lymphocytes, erythrocytes, and epidermis homogenates were measured in 20 normal subjects and 15 patients with psoriasis by high-performance liquid chromatography. The levels of AMP, GMP, and IMP purine monophosphates are decreased in the epidermis and red cells of psoriasis patients, whereas the final products of hypoxanthine, xanthine, and uric acid metabolism are accumulating, and the activities of ADA and PNP are increased double in the skin, all this indicating purine derivatives catabolism.

L8 ANSWER 26 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:731707 CAPLUS
DOCUMENT NUMBER: 128:16289
ORIGINAL REFERENCE NO.: 128:3091a,3094a
TITLE: Compositions for external use
INVENTOR(S): Kondo, Chiharu; Senoo, Masami
PATENT ASSIGNEE(S): Kosei Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09291011	A	19971111	JP 1996-127955	19960424 <--
PRIORITY APPLN. INFO.:			JP 1996-127955	19960424

AB Compns. [cosmetics or topical prepns.] for external use comprise: (A) apple exts. and (B) tyrosinase inhibitors, active oxygen

scavengers, antioxidants, cell activators, antiinflammatories and/or moisturizers. A skin-care and antiaging lotion contained glycerin 5.0, 1,3-butylene glycol 6.5, POE sorbitan monolaurate 1.2, ethanol 8.0, apple exts. 0.01, superoxide dismutase 0.01, preservatives, perfumes, and purified water to 100 %.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L8 ANSWER 27 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:575486 CAPLUS
DOCUMENT NUMBER: 127:166783
ORIGINAL REFERENCE NO.: 127:32213a,32216a
TITLE: Compositions for external use
INVENTOR(S): Kondo, Chiharu; Takayama, Akemi; Senoo, Masaki; Takemoto, Hiroko
PATENT ASSIGNEE(S): Kosei Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09183718	A	19970715	JP 1995-353525	19951229 <--

PRIORITY APPLN. INFO.: JP 1995-353525 19951229

AB Compns. for external use comprise: (A) phytic acid and/or its salts and (B) active oxygen scavengers, antioxidants, antiinflammatories, cell activators and/or moisturizers. Ointments and other dosage forms are formulated. Cosmetic formulations also are described.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 28 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:534374 CAPLUS
DOCUMENT NUMBER: 127:140194
ORIGINAL REFERENCE NO.: 127:26953a,26956a
TITLE: Topical preparations containing adenosine and hamamelis tannins
INVENTOR(S): Takei, Masumi
PATENT ASSIGNEE(S): Noevir K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09157153	A	19970617	JP 1995-346518	19951211 <--
JP 3578858	B2	20041020		

PRIORITY APPLN. INFO.: JP 1995-346518 19951211

AB Topical prepns. such as skin lotions contain adenosine or its derivs. and hamamelis tannins. The prepns. synergistically enhanced the removal of active oxygen from e.g. skin. A lotion contained decaglycerin monolaurate 1.00, 1,3-butylene glycol 3.00, sorbitol 2.00, ethanol 2.00, Me p-hydroxybenzoate 0.10, AMP 0.02, cAMP 0.01, Peonia suffructicosa exts. 0.01, perfumes 0.20 and purified water to 100 weight%.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

L8 ANSWER 29 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:491402 CAPLUS
DOCUMENT NUMBER: 127:99538
ORIGINAL REFERENCE NO.: 127:19097a,19100a
TITLE: Topical compositions
INVENTOR(S): Hoshino, Taku; Kondo, Chiharu; Senoo, Masami; Yamashita, Eiji
PATENT ASSIGNEE(S): Kosei K. K., Japan; Itano Reito K. K.
SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09143063	A	19970603	JP 1995-326241	19951122 <--
JP 2006348035	A	20061228	JP 2006-187127	20060706

PRIORITY APPLN. INFO.: JP 1995-326241 A3 19951122
AB Topical compns. for cosmetic or therapeutic use comprise (A) astaxanthin and (B) active ingredients such as moisturizers, antioxidants and active oxygen removers. As an example, a cosmetic emulsion contained stearic acid 18.0, cetanol 4.0, triethanolamine 2.0, glycerin 5.0, astaxanthin 1.0, lactic acid 1.0, and purified water to 100%.
OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L8 ANSWER 30 OF 221 TOXCENTER COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:243302 TOXCENTER
COPYRIGHT: Copyright 2010 ACS
DOCUMENT NUMBER: CA12802016289Y
TITLE: Compositions for external use
AUTHOR(S): Kondo, Chiharu; Senoo, Masami
CORPORATE SOURCE: ASSIGNEE: Kosei Co., Ltd.
PATENT INFORMATION: JP 97291011 A 11 Nov 1997
SOURCE: (1997) Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF.
COUNTRY: JAPAN
DOCUMENT TYPE: Patent
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 1997:731707
LANGUAGE: Japanese
ENTRY DATE: Entered STN: May 2009
Last Updated on STN: May 2009
AB Compns. [cosmetics or topical prepns.] for external use comprise: (A) apple exts. and (B) tyrosinase inhibitors, active oxygen scavengers, antioxidants, cell activators, antiinflammatories and/or moisturizers. A skin-care and antiaging lotion contained glycerin 5.0, 1,3-butylene glycol 6.5, POE sorbitan monolaurate 1.2, ethanol 8.0, apple exts. 0.01, superoxide dismutase 0.01, preservatives, perfumes, and purified water to 100 %.

L8 ANSWER 31 OF 221 TOXCENTER COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:241577 TOXCENTER
COPYRIGHT: Copyright 2010 ACS
DOCUMENT NUMBER: CA12712166783Y
TITLE: Compositions for external use
AUTHOR(S): Kondo, Chiharu; Takayama, Akemi; Senoo, Masaki; Takemoto,

Hiroko
CORPORATE SOURCE: ASSIGNEE: Kosei Co., Ltd.
PATENT INFORMATION: JP 97183718 A 15 Jul 1997
SOURCE: (1997) Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF.
COUNTRY: JAPAN
DOCUMENT TYPE: Patent
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 1997:575486
LANGUAGE: Japanese
ENTRY DATE: Entered STN: May 2009
Last Updated on STN: May 2009
AB Compns. for external use comprise: (A) phytic acid and/or its salts and (B) active oxygen scavengers, antioxidants, antiinflammatories, cell activators and/or moisturizers. Ointments and other dosage forms are formulated. Cosmetic formulations also are described.

L8 ANSWER 32 OF 221 TOXCENTER COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:240664 TOXCENTER
COPYRIGHT: Copyright 2010 ACS
DOCUMENT NUMBER: CA12707099538G
TITLE: Topical compositions
AUTHOR(S): Hoshino, Taku; Kondo, Chiharu; Senoo, Masami; Yamashita, Eiji
CORPORATE SOURCE: ASSIGNEE: Itano Reito K. K.
PATENT INFORMATION: JP 97143063 A 3 Jun 1997
SOURCE: (1997) Jpn. Kokai Tokkyo Koho, 25 pp.
CODEN: JKXXAF.
COUNTRY: JAPAN
DOCUMENT TYPE: Patent
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 1997:491402
LANGUAGE: Japanese
ENTRY DATE: Entered STN: May 2009
Last Updated on STN: May 2009
AB Topical compns. for cosmetic or therapeutic use comprise (A) astaxanthin and (B) active ingredients such as moisturizers, antioxidants and active oxygen removers. As an example, a cosmetic emulsion contained stearic acid 18.0, cetanol 4.0, triethanolamine 2.0, glycerin 5.0, astaxanthin 1.0, lactic acid 1.0, and purified water to 100%.

L8 ANSWER 33 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 11
ACCESSION NUMBER: 1998:86830 BIOSIS
DOCUMENT NUMBER: PREV199800086830
TITLE: Allergic reactions to ampicillin. Studies on the specificity and selectivity in subjects with immediate reactions.
AUTHOR(S): Romano, A.; Torres, M. J.; Fernandez, J.; Vega, J. M.; Mayorga, C.; Garcia, J.; Blanca, M. [Reprint author]
CORPORATE SOURCE: Allergy Lab., Carlos Hays Hospital, Malaga, Spain
SOURCE: Clinical and Experimental Allergy, (Dec., 1997) Vol. 27, No. 12, pp. 1425-1431. print.
ISSN: 0954-7894.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 24 Feb 1998
Last Updated on STN: 24 Feb 1998
AB Background. Ampicillin (AMP) is a drug that has been prescribed extensively. Reactions that have been reported include exanthema, desquamative contact eczema, urticaria and anaphylaxis. Experimental

evidence indicates that the side chain of AMP is a structure that may induce a selective immune response either at the humoral or lymphocyte T-cell level. With regard to IgE reactions, the selectivity and specificity of the response needs to be studied in humans. Objectives. To study the specificity of the IgE response in a group of subjects who had an immediate allergic reaction after the administration of AMP. Methods. Subjects developing an immediate response (anaphylaxis or urticaria) after the administration of AMP or an aminopenicillin derivative with the same side chain as AMP were studied. Skin tests were made to determinants generated from benzyl penicillin (BP): benzyl penicilloyl (BPO) and minor determinant mixture (MDM), as well as amoxicillin (AX) and AMP. Specific IgE antibodies were determined to benzyl penicilloyl polylisine (BPO-PLL), amoxicilloyl-polylisine (AX-PLL) and ampicilloyl-polylisine (AMP-PLL). The specificity of the IgE antibody response was studied by RAST and RAST inhibition. Subjects were classified in three categories: group A: those who were skin test and/or RAST positive to determinants derived from benzylpenicllin, group B: those who were negative to determinants derived from benzylpenicillin but were skin test and/or RAST positive to determinants derived from AX and AMP and group C: those who were exclusively positive to determinants derived from AMP. Results. A total of 48 subjects was included in the study. In group A there were 35 cases, in group B 10 cases, and in group C three cases. RAST inhibition studies showed that in some instances the side chain of AMP could induce specific responses with a variable degree of crossreactivity between BP and AX. Conclusions. Although AMP can induce an immediate IgE response in subjects allergic to betalactams and the structure of the side chain may contribute to the specificity of the response, our results indicate that in most instances crossreactivity with the other penicillins exists and that in the groups studied selective reactions to just AMP derived determinants were uncommon.

L8 ANSWER 34 OF 221 MEDLINE on STN
ACCESSION NUMBER: 1997465677 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9326397
TITLE: Endothelial cell surface alkaline phosphatase activity is induced by IL-6 released during wound repair.
AUTHOR: Gallo R L; Dorschner R A; Takashima S; Klagsbrun M; Eriksson E; Bernfield M
CORPORATE SOURCE: Department of Dermatology, Joint Program of Neonatology, Children's Hospital, Boston, Massachusetts 02115, U.S.A.
CONTRACT NUMBER: AR01875 (United States NIAMS NIH HHS)
AR44379 (United States NIAMS NIH HHS)
CA28735 (United States NCI NIH HHS)
+
SOURCE: The Journal of investigative dermatology, (1997 Oct) Vol. 109, No. 4, pp. 597-603.
Journal code: 0426720. ISSN: 0022-202X. L-ISSN: 0022-202X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199710
ENTRY DATE: Entered STN: 5 Nov 1997
Last Updated on STN: 5 Nov 1997
Entered Medline: 23 Oct 1997

AB Phosphatase activity on endothelial cell surfaces is responsible, in part, for the conversion of adenosine nucleotides to adenosine, a potent vasodilator and anti-inflammatory mediator that can protect tissues from the ischemic damage that results from injury. To evaluate whether

phosphatases are actively induced by a soluble factor released following injury, the effect of tissue fluids collected from porcine or human skin wounds was tested on primary cultures of endothelial cells. Phosphatase activity increased approximately 50-fold following 48-h culture in the presence of wound fluid. Inductive activity was present only in fluids collected during the inflammatory phase of wound repair. The phosphatase activity metabolized adenosine monophosphate to free phosphate and was the liver/bone/kidney alkaline phosphatase isoenzyme: activity was temperature- and levamisole-sensitive, 1-phenylalanine-resistant, and linked to the cell surface via phospholipid, and migrated at a size identical to this isozyme. interleukin-6 was identified as the phosphatase-inducing factor in wound fluid and the related cytokines, leukaemia inhibiting factor, and oncostatin M, caused a similar degree of alkaline phosphatase induction. Therefore, following injury, accumulation of interleukin-6 can lead to production by alkaline phosphatase of adenosine and subsequent protection from ischemic injury.

L8 ANSWER 35 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 12

ACCESSION NUMBER: 1997:488390 BIOSIS
DOCUMENT NUMBER: PREV199799787593
TITLE: Apical regulation of nonselective cation channels by ATP in larval bullfrog skin.
AUTHOR(S): Cox, Thomas C.
CORPORATE SOURCE: Dep. Physiol., Southern Illinois Univ., Carbondale, IL 62901, USA
SOURCE: Journal of Experimental Zoology, (1997) Vol. 279, No. 3, pp. 220-227.
CODEN: JEZOAO. ISSN: 0022-104X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 7 Nov 1997
Last Updated on STN: 7 Nov 1997

AB The apical membrane of larval bullfrog skin contains a nonselective cation channel that can be activated by apically applied amiloride and acetylcholine. In our search for other ligands that might activate this channel, ATP and other purinergics were tested. When ATP (10-1,000 mu-M) was added to the apical side of tadpole skin mounted in a modified Ussing chamber, there was a transient increase in short circuit current (Isc). The increase in Isc occurred with either Na or K as the dominant cation in the apical solution. The response was larger in a calcium-free Ringer. ADP and AMP had similar but smaller effects than ATP. Adenosine and UTP were without effect. The ATP response was blocked by W-7, atropine, curare, diltiazem, and suramin. These blockers also inhibit amiloride stimulation of Isc, suggesting that ATP activates a related transport pathway. Studies with analogs of ATP suggest that the ATP binding site in tadpole skin has characteristics in common with the P2x receptor found in other tissues. These results demonstrate that in addition to amiloride and acetylcholine, ATP stimulates cation transport at the apical membrane of larval amphibian skin epithelia.

L8 ANSWER 36 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1997:170550 BIOSIS
DOCUMENT NUMBER: PREV199799477153
TITLE: Effects of clonidine on myocardial beta-adrenergic receptor-adenyl cyclase-cAMP system after scalds in rats.
AUTHOR(S): He Hua-Mei, Sun Ji-Wu [Reprint author]; Xiao Cheng-Rong; Song Yu-Nan [Reprint author]
CORPORATE SOURCE: Dep. Pharmacol., Third Military Med. Coll., Chongqing

630038, China
SOURCE: Acta Pharmacologica Sinica, (1997) Vol. 18, No. 2, pp. 146-149.
CODEN: CYLPDN. ISSN: 0253-9756.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 24 Apr 1997
Last Updated on STN: 2 Jun 1997
AB AIM: To study the role of clonidine (Clo) on the myocardial beta-adrenergic receptor (beta-AR)-adenyl cyclase (AC)-cAMP system after the scalds in rats. METHODS: A 30% skin-full-thickness scald was produced by immersing rats in 95 degree C water for 9 s. Clo 0.1-3.0 mg cntdot kg-1 was injected ip to rats at 30 min before scalds, yohimbine (Yoh) 0.05 mg cntdot kg-1 or prazosin (Pra) 0.03 mg cntdot kg-1 to rats at 30 min before ip Clo. beta-AR density and affinity, AC activity, phosphoric diester hydrolases (PDH) activity, and cAMP content were determined with radioreceptor assay, indirect method, enzyme-radiochemical assay, and radioimmunoassay, respectively. RESULTS: Clo inhibited the decrease of the myocardial beta-AR density, the attenuation of AC activity, and the reduction of cAMP content at 12 h after the scalds. Yoh partially reversed the effects of Clo on the three parameters. But Pra did not. CONCLUSION: Clo reversed the changes of the myocardial beta-AR-AC-cAMP system resulted from the scalds in the rats.

L8 ANSWER 37 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:151051 CAPLUS
DOCUMENT NUMBER: 126:315144
ORIGINAL REFERENCE NO.: 126:61081a,61084a
TITLE: Metabolic depression and sodium-potassium ATPase in the estivating frog, Neobatrachus kunapalari
AUTHOR(S): Flanigan, J. E.; Guppy, M.
CORPORATE SOURCE: Center Native Animal Research, University Western Australia, Nedlands, 6907, Australia
SOURCE: Journal of Comparative Physiology, B: Biochemical, Systemic, and Environmental Physiology (1997), 167(2), 135-145
CODEN: JPBPDL; ISSN: 0174-1578
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The role of Na+K+-ATPase activity was assessed in the metabolic depression of estivating frogs. In estivation the metabolic rate of the Australian desert frog N. kunapalari was 50-67% lower. The rate of O consumption of muscle and brain was 30 and 50%, resp., lower in estivating frogs. Ouabain inhibited the in vitro rate of O consumption of skin and brain by 20 and 30%, resp. In muscle, ouabain stimulated in vitro O consumption. There was a reduction of ATP in the liver and in the level of total adenylates in both muscle and liver.
OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L8 ANSWER 38 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:397250 CAPLUS
DOCUMENT NUMBER: 125:67199
ORIGINAL REFERENCE NO.: 125:12695a,12698a
TITLE: Cosmetics containing rutin and cell activating agents
INVENTOR(S): Sasaki, Ichiro; Takayama, Akyoshi; Kobayashi, Shinji
PATENT ASSIGNEE(S): Kosei Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08099860	A	19960416	JP 1994-261946	19940930 <--

PRIORITY APPLN. INFO.: JP 1994-261946 19940930

AB Cosmetics contain rutin and cell activating agents such as ATP, AMP and succinic acid. A lotion contained ethoxylated hardened castor oil 1.0, ethanol 15.0, hinokitiol 0.1, perfumes 0.1, rutin 0.5, citric acid 0.1, sodium citrate 0.3, 1,3-butylene glycol 4.0, and purified water to 100 %. The prepns. showed skin smoothening , antiaging, and wound healing activities.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L8 ANSWER 39 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 13
ACCESSION NUMBER: 1998:136503 CAPLUS
DOCUMENT NUMBER: 128:227108
ORIGINAL REFERENCE NO.: 128:44917a,44920a
TITLE: Method development for the simultaneous detection of adenine and pyridine nucleotides in murine skin following exposure to sulfur mustard
AUTHOR(S): Ricketts, Karen M.; Casillas, Robert P.
CORPORATE SOURCE: Drug Assessment Div., U.S. Army Med. Research Inst. Chem. Defense, APG, MD, 21010, USA
SOURCE: Medical Defense Bioscience Review, Proceedings, Baltimore, May 12-16, 1996 (1996), Volume 2, 1037-1044. National Technical Information Service: Springfield, Va.
CODEN: 64UTAN
DOCUMENT TYPE: Conference
LANGUAGE: English

AB Sulfur mustard (HD) is a potent vesicant that rapidly penetrates the skin causing lesions with severity depending on the total dose and duration of exposure. Sulfur mustard alkylates cellular DNA which is depurinated, leaving sites which are cleaved by endonucleases. Increased DNA breakage activates the chromosomal enzyme poly (ADP-ribose) polymerase (PADPRP) leading to the depletion of NAD+ and ATP. There is no established method for the simultaneous anal. of ATP and NAD+ in skin. A reversed-phase high-performance liquid chromatog. (HPLC) method for the detection of ATP and NAD+ in murine skin was evaluated. Nucleotides were isolated by spin column filtration from alkaline extracted murine skin. Anal. was performed on a Waters HPLC system, equipped with a Supelcosil LC-ABZ column, using a linear gradient. The simultaneous extraction of ATP and NAD+ from skin and subsequent quant. anal. by HPLC provides a means to evaluate the in vivo effectiveness of PADPRP inhibitors as potential antivesicants.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 40 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 14
ACCESSION NUMBER: 1996:232273 BIOSIS
DOCUMENT NUMBER: PREV199698796402
TITLE: Iontophoresis of bases, nucleosides and nucleotides.
AUTHOR(S): Van Der Geest, Ronald; Hueber, Frederique; Szoka., Francis C., Jr.; Guy, Richard H. [Reprint author]
CORPORATE SOURCE: Dep. Biopharmaceutical Sci., Univ. Calif., San Francisco, CA 94143-0446, USA
SOURCE: Pharmaceutical Research (New York), (1996) Vol. 13, No. 4, pp. 553-558.

CODEN: PHREEB. ISSN: 0724-8741.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 28 May 1996
Last Updated on STN: 28 May 1996

AB Purpose: To investigate whether transdermal iontophoresis may be potentially useful for delivery of oligonucleotide drugs, the electrotransport of representative bases (uracil and adenine), nucleosides (uridine and adenosine) and nucleotides (AMP, ATP, GTP and imido-GTP) across mammalian skin in vitro has been considered. Methods: While the passive permeability of all compounds investigated (from 1 mM solutions at pH 7.4) was very low, the application of constant current iontophoresis (0.55 mA/cm-2) significantly enhanced the transport of both charged and uncharged species. Results: The efficiency of delivery depended only weakly upon lipophilicity, varied quite linearly with concentration (for AMP and ATP), was inversely sensitive to molecular weight, and was strongly influenced by charge. Neutral solutes were delivered better from the anode than the cathode, as expected; post-iontophoresis, passive permeabilities were greater than those of the untreated controls, suggesting that iontophoretically-induced changes in barrier function cannot be completely repaired in in vitro model systems. The triphosphate nucleotides, ATP and GTP, were essentially completely metabolized (presumably to their corresponding mono-phosphates) during their iontophoretic delivery, while imido-GTP was apparently resistant to enzymatic attack; however, comparison of the transport data from AMP and ATP suggested that ATP metabolism occurred primarily after the rate-limiting step of iontophoresis. Conclusions: The results obtained are consistent with the general patterns of behavior previously observed in investigations of amino acid and peptide electrotransport. It remains to be seen whether extension of the research described here to larger oligonucleotide species is a feasible long-term objective.

L8 ANSWER 41 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 15
ACCESSION NUMBER: 1997:319031 CAPLUS
DOCUMENT NUMBER: 127:29803
ORIGINAL REFERENCE NO.: 127:5633a,5636a
TITLE: APRT: A versatile in vivo resident reporter of local mutation and loss of heterozygosity
AUTHOR(S): Stambrook, Peter J.; Shao, Changshun; Stockelman, Michael; Boivin, Greg; Engle, Sandra J.; Tischfield, Jay A.
CORPORATE SOURCE: Departments of Cell Biology, Neurobiology, and Anatomy and Pathology and Laboratory Medicine, University of Cincinnati, College of Medicine, Cincinnati, OH, 45267-0521, USA
SOURCE: Environmental and Molecular Mutagenesis (1996), 28(4), ;471-482
CODEN: EMMUEG; ISSN: 0893-6692
PUBLISHER: Wiley-Liss
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors describe an in vivo mutagenesis model that utilizes reverse mutation and forward mutation at the endogenous Aprt locus. Reverse mutation provides an in situ method for detecting environments or agents had cause point mutations. Forward mutation detects large chromosomal events, including mitotic recombination, chromosome loss, and large multilocus deletion, all of which can lead to loss of heterozygosity. Detection of reverse mutation in vivo is based on the differential capacity of Aprt+ and Aprt- cells to sequester radiolabeled adenine by catalyzing its conversion to adenosine monophosphate with subsequent incorporation into nucleic acids. Cells lacking APRT activity cannot accumulate exogenously administered, tagged adenine, whereas Aport+ cells

can and will thereby become marked. Thus, genetically modified mice with mutant but revertible Aprt alleles should be a useful vehicle for in situ detection of mutagenic activity in the whole animal. The feasibility of this model has been illustrated, first, by showing that APRT-deficient mice are viable and, second, by demonstrating that the minority of Aprt+ cells within a chimeric tumor growing in an Aprt- mouse can be selectively labeled following IP injection of [14C]-adenine and can be identified by autoradiog. Forward mutation, detected by growth in selective medium of primary cells derived from Aprt+/- heterozygous mice, provides an independent estimate of in vivo mutation frequency. The frequency with which Aprt- colonies arise provides a measure of the frequency of Aprt--neg. cells in the tissue at that point in time. Culture of skin fibroblasts in 2,6-diaminopurine (DAP) produced Aprt- colonies with a frequency of about 10-4. This frequency is similar to that found for human T lymphocytes from individuals heterozygous at the Aprt locus. In both cases, the majority of mutagenic events involved allele loss. Polymerase chain reaction with linked polymorphic microsatellites on mouse chromosome 8 demonstrated that allele loss was mediated mostly by mitotic recombination, as was the case for human T lymphocytes. The high frequency of mitotic recombination and allele loss at a neutral locus has significant implications for the process of tumorigenesis and argues that spontaneous or induced mitotic recombination may play a causal role in the progression to cancer.

OS.CITING REF COUNT: 53 THERE ARE 53 CAPLUS RECORDS THAT CITE THIS RECORD (53 CITINGS)

REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 42 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:681163 CAPLUS

DOCUMENT NUMBER: 126:73952

ORIGINAL REFERENCE NO.: 126:14313a,14316a

TITLE: The status of nucleocompounds and its variability in meat of poultry. Part 1. Study of the influence of poultry species on the distribution of nucleopurines

AUTHOR(S): Gosch, B.; Montag, A.

CORPORATE SOURCE: Institut Biochemie Lebensmittelchemie, Universitaet Hamburg, Hamburg, D-20146, Germany

SOURCE: Deutsche Lebensmittel-Rundschau (1996), 92(10), 318-323
CODEN: DLRUAJ; ISSN: 0012-0413

PUBLISHER: Wissenschaftliche Verlagsgesellschaft

DOCUMENT TYPE: Journal

LANGUAGE: German

AB The content of purine bases was examined in different poultry species (e.g. chicken, duck, peasant) and different breedings. The muscles of upper thigh and breast, skin, and liver were investigated. The distribution of purine bases in the liver differed from that in other tissues. The most frequent purine base was guanine, followed by adenine. As determined by extraction with HClO4 the amount of inosine and IMP was 100% higher in breast- than in thigh muscle. The distribution of lower mol. weight compds. in the liver differed from that of the other tissues. The liver of pigeons contained more hypoxanthine than that of other poultry species.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 43 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 16

ACCESSION NUMBER: 1996:215571 BIOSIS

DOCUMENT NUMBER: PREV199698771700

TITLE: Enzymatic activities affecting exogenous nicotinamide

adenine dinucleotide in human skin fibroblasts.
AUTHOR(S): Aleo, Maria Francesca [Reprint author]; Sestini, Silvia; Pompucci, Giuseppe; Preti, Augusto
CORPORATE SOURCE: Sezione di Biochimica, Dipartimento di Scienze Biomediche e Biotecnologie, Universita degli Studi di Brescia, Via Valsabbina 19, 25123 Brescia, Italy
SOURCE: Journal of Cellular Physiology, (1996) Vol. 167, No. 1, pp. 173-176.
CODEN: JCLLAX. ISSN: 0021-9541.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 8 May 1996
Last Updated on STN: 10 Jun 1996

AB The fate of nicotinamide adenine dinucleotide (NAD), AMP, and ADP-ribose supplied to intact human skin fibroblasts was monitored, and the concentrations of intra- and extracellular pyridine and purine compounds were determined by HPLC analysis. Two enzymatic activities affecting extracellular NAD were detected on the plasma membrane, one hydrolyzing the pyrophosphoric bond and yielding nicotinamide mononucleotide (nucleotide pyrophosphatase) and the other cleaving the glycoside link and releasing nicotinamide (NAD-glycohydrolase). No AMP or ADP-ribose was found in the extracellular medium of cells incubated with NAD, the former being completely catabolized to hypoxanthine and the latter degraded to adenine and hypoxanthine.

L8 ANSWER 44 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 17
ACCESSION NUMBER: 1996:174518 CAPLUS
DOCUMENT NUMBER: 124:228953
ORIGINAL REFERENCE NO.: 124:42393a,42396a
TITLE: Acute paw edema formation induced by ATP: re-evaluation of the mechanisms involved
AUTHOR(S): Ziganshina, L. E.; Ziganshin, A. U.; Hoyle, C. H. V.; Burnstock, G.
CORPORATE SOURCE: Dep. Anatomy Developmental Biology, Univ. College London, London, WC1E 6BT, UK
SOURCE: Inflammation Research (1996), 45(2), 96-102
CODEN: INREFB; ISSN: 1023-3830
PUBLISHER: Birkhaeuser
DOCUMENT TYPE: Journal
LANGUAGE: English

AB ATP-induced inflammation was investigated using subplantar injection in the mouse hind paw. The order of efficacy of purinoceptor agonists for inducing paw edema (30 nmol per paw) was ATP = α,β-methylene ATP = 2-methylthio ATP > adenosine > UTP > ADP > AMP. Diadenosine polyphosphates effectively induced paw edema formation with an order of efficacy of P1,P4-di(adenosine-5')tetraphosphate = P1,P5-di(adenosine-5')-pentaphosphate = P1,P6-di(adenosine-5') hexaphosphate » ATP = P1,P3-di(adenosine-5')triphosphate > P1,P2-di (adenosine-5')pyrophosphate. Systemic administration of P2-purinoceptor antagonists (30-100 μmol/kg), suramin, 4,4'-diisothiocyanatostilbene-2,2'-disulfonate, pyridoxalphosphate-6-azophenyl-2',4'-disulfonic acid and Cibacron blue, reduced the intensity of ATP-induced edema. At 30 μmol/kg 8-(p-sulfophenyl)theophylline (non-selective adenosine receptor antagonist), 3,7-dimethyl-1,1-propargylxanthine (adenosine A2 receptor antagonist), triprolidine (histamine H1 receptor antagonist), ranitidine (histamine H2 receptor antagonist) and ketanserin (5-hydroxytryptamine 5-HT2 receptor antagonist), but neither 8-cyclopentyl-1,3-dipropylxanthine (adenosine A1 receptor antagonist), nor indomethacin (cyclooxygenase inhibitor) inhibited the ATP-induced swelling. Topical (100 nmol per paw), but not systemic (100 μmol/kg) administration of NG-nitro-L-arginine Me ester (nitric oxide synthase inhibitor) reduced the

intensity of the ATP-induced paw edema. These results show that ATP can induce an inflammatory edematous reaction and may contribute to understanding the underlying mechanisms.

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L8 ANSWER 45 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:721149 CAPLUS
DOCUMENT NUMBER: 126:108757
ORIGINAL REFERENCE NO.: 126:20931a,20934a
TITLE: Combined effect of ultrasound and chemical enhancers on the skin permeation of aminopyrine
AUTHOR(S): Ueda, Hideo; Isshiki, Rika; Ogihara, Masahiko; Sugibayashi, Kenji; Morimoto, Yasunori
CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Josai University, 1-1 Keyakidai, Sakado, Saitama, 350-02, Japan
SOURCE: International Journal of Pharmaceutics (1996), 143(1), 37-45
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The combined effect of 150 kHz ultrasound with 111 mW/cm2 intensity and chemical enhancers on the skin permeation of aminopyrine (AMP) was investigated using excised hairless rat skin. Monoterpenes (L-menthol, L-carvone and D-limonene), laurocapram (Azone), glycerol monocaprylate (Sefsol-318), iso-Pr myristate and ethanol were selected as enhancers. Combined application of ultrasound and enhancers increased the skin permeation rate (flux) of AMP compared with ultrasound or enhancers alone. Better effects were obtained by the combination with monoterpenes. The influence of detailed conditions of ultrasound and enhancer applications on the AMP flux was further investigated using L-menthol. The enhancement effect by this combination was increased with an increase in ultrasonic application duration and L-menthol concentration, suggesting that these conditions might be used to achieve the controlled drug delivery. A pretreatment experiment with ultrasound or L-menthol was carried out, and L-menthol content in the skin and the skin permeation of deuterium oxide (D2O), used as a donor vehicle, were measured to understand the role of ultrasound in the combined effect. Application of ultrasound to the L-menthol-pretreated skin increased the AMP flux, while the effect of L-menthol on ultrasonic-pretreated skin was similar to that of L-menthol alone. The ultrasound increased the L-menthol content in the skin as well as the skin permeation of D2O from a vehicle with L-menthol. These results suggested that simultaneous application of ultrasound and enhancers is essential to obtain the pronounced effect. Ultrasound application also strongly assisted migration of L-menthol into skin, which increases the enhancing action on the skin permeation for a drug.

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L8 ANSWER 46 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:89229 CAPLUS
DOCUMENT NUMBER: 124:126879
ORIGINAL REFERENCE NO.: 124:23413a,23416a
TITLE: Topical preparations containing Flor de Manita extract and active oxygen scavengers, antioxidants, or other biologically active substances
INVENTOR(S): Suzuki, Masayuki; Yanagisawa, Makiko; Hayashi, Akinobu; Asai, Mariko
PATENT ASSIGNEE(S): Dowa Mining Co., Japan; Kosei Kk

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07277939	A	19951024	JP 1994-89204	19940405 <--

PRIORITY APPLN. INFO.: JP 1994-89204 19940405

AB Topical prepns. contain Flor de Manita (Mexican plant) exts. and active oxygen scavengers, antioxidants, inflammation inhibitors, tyrosinase inhibitors and/or humectants. The prepns. showed marked cosmetic and antiaging activities. A cosmetic emulsion contained squalane 5.0, white petrolatum 2.0, beeswax 0.5, sorbitan sesquioleate 0.8, polyoxyethylene oleyl ether 1.2, 1,3-butylene glycol 5.0, Flor de Manita extract 0.1, dl-α-tocopherol 0.01, Et alc. 5.0, preservatives 0.2, perfumes 0.1, 2% xanthan gum 20.0, and purified water to 100 parts.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L8 ANSWER 47 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:341167 CAPLUS
DOCUMENT NUMBER: 122:114650
ORIGINAL REFERENCE NO.: 122:21343a,21346a
TITLE: Composition containing nucleic acids and their components to prevent premature aging of skin
PATENT ASSIGNEE(S): Schreiner, Edelgard, Germany
SOURCE: Ger. Offen., 4 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4323615	A1	19950119	DE 1993-4323615	19930712 <--

PRIORITY APPLN. INFO.: DE 1993-4323615 19930712

AB Topical anti-aging compns. for protection against sunlight and radiation damage contain nucleic acids and their degradation products such as purine and pyrimidine bases, nucleosides, nucleotides, oligonucleotides, and their analogs.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 48 OF 221 TOXCENTER COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:130594 TOXCENTER
COPYRIGHT: Copyright 2010 ACS
DOCUMENT NUMBER: CA12410126879R
TITLE: Topical preparations containing Flor de Manita extract and active oxygen scavengers, antioxidants, or other biologically active substances
AUTHOR(S): Suzuki, Masayuki; Yanagisawa, Makiko; Hayashi, Akinobu; Asai, Mariko
CORPORATE SOURCE: ASSIGNEE: Kosei Kk
PATENT INFORMATION: JP 95277939 A 24 Oct 1995
SOURCE: (1995) Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF.
COUNTRY: JAPAN
DOCUMENT TYPE: Patent
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 1996:89229
LANGUAGE: Japanese
ENTRY DATE: Entered STN: 16 Nov 2001
Last Updated on STN: 27 May 2008

AB Topical prepns. contain Flor de Manita (Mexican plant) exts. and active oxygen scavengers, antioxidants, inflammation inhibitors, tyrosinase inhibitors and/or humectants. The prepns. showed marked cosmetic and antiaging activities. A cosmetic emulsion contained squalane 5.0, white petrolatum 2.0, beeswax 0.5, sorbitan sesquioleate 0.8, polyoxyethylene oleyl ether 1.2, 1,3-butylene glycol 5.0, Flor de Manita extract 0.1, dl-α-tocopherol 0.01, Et alc. 5.0, preservatives 0.2, perfumes 0.1, 2% xanthan gum 20.0, and purified water to 100 parts.

L8 ANSWER 49 OF 221 EMBASE DUPLICATE 18
ACCESSION NUMBER: 1995078204 EMBASE
TITLE: Chronic cough with eosinophilic bronchitis: Examination for variable airflow obstruction and response to corticosteroid.
AUTHOR: Gibson, P.G., Dr. (correspondence); Hargreave, F.E.; Girgis-Gabardo, A.; Morris, M.; Denburg, J.A.; Dolovich, J.
CORPORATE SOURCE: Respiratory Medicine Unit, John Hunter Hospital, Hunter Regional Mail Centre, Locked Bag 1, Hunter, NSW 2310, Australia.
SOURCE: Clinical and Experimental Allergy, (1995) Vol. 25, No. 2, pp. 127-132.
ISSN: 0954-7894 CODEN: CLEAEN
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 5 Apr 1995
Last Updated on STN: 5 Apr 1995

AB The purpose of this study was to examine airway responsiveness, sputum cells and the effects of inhaled corticosteroid in the chronic cough syndrome associated with eosinophilic bronchitis. We studied nine consecutive referrals with chronic cough, sputum with >10% eosinophils, normal spirometry, and normal methacholine airway responsiveness. Clinical assessment, sputum analysis, allergy skin tests and a methacholine inhalation test were performed at the first visit. Peak expiratory flow (PEF) was measured twice daily for 1 week followed by an adenosine monophosphate (AMP) inhalation test. Subjects were then treated with inhaled beclomethasone 0.4 mg twice daily for 7 days. Sputum analysis and measurement of methacholine responsiveness were then repeated. Excessive airway narrowing to methacholine was not present in any of the subjects. A methacholine plateau response was present in five subjects. Hyperresponsiveness to AMP was absent in six of the nine subjects, and PEF variability was not increased for eight subjects. Corticosteroid therapy led to a reduction in sputum eosinophil counts from 40.1 (SD 21 4)% to 4.0 (4.5)% but there was no significant change in metachromatic cell counts (0.8 SD 0.5% vs 0.6 SD 0.6%) or total cell counts. Methacholine responsiveness improved within the normal range in the three subjects in whom it could be determined. Chronic cough associated with eosinophilic airway inflammation can occur in the absence

of variable airflow obstruction (asthma) and can improve after treatment with inhaled corticosteroid. This treatment can reduce the level of methacholine responsiveness within the normal range and reduces sputum eosinophils but not mast eels. These results suggest that the occurrence of variable airflow obstruction depends on the baseline level of methacholine responsiveness, the degree of eosinophilic infiltration and the degree to which methacholine responsiveness becomes heightened.

L8 ANSWER 50 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1995:981164 CAPLUS
DOCUMENT NUMBER: 124:21764
ORIGINAL REFERENCE NO.: 124:3991a,3994a
TITLE: Effects of cAMP and theophylline on chloride conductance across toad skin
AUTHOR(S): Katz, U.; Nagel, W.
CORPORATE SOURCE: Dep. Biol, Technion, Israel Inst. Technol., Haifa, Israel
SOURCE: Journal of Physiology (Cambridge, United Kingdom) (1995), 489(1), 105-14
CODEN: JPHYA7; ISSN: 0022-3751
PUBLISHER: Cambridge University Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of the phosphodiesterase inhibitors theophylline and iso-Bu methylxanthine (IBMX) on baseline and voltage-activated Cl- conductance (gCl) of toad skin were compared with those of the potent 2-chlorophenylthio analog of cAMP (CPT-cAMP). Using intact and split skins of Bufo viridis the authors confirmed that theophylline and IBMX raised the voltage-activated gCl with a pattern identical to that seen under control conditions. This effect was small or missing if gCl by serosa-pos. clamp potentials was completely lost under these conditions. Coinciding with the loss of voltage activation of gCl the plateau value of the Lorentzian component of fluctuation in current as serosa-pos. clamp potentials decreased by almost 50%. The corner frequencies were not notably different. After CPT-cAMP, the sigmoidal voltage-conductance relation that is characteristic of control conditions or after theophylline disappeared; the patterns were variable and incompatible with voltage activation. The voltage-activated gCl under control conditions and with theophylline was blocked by mucosal NO3-, I- or SCN-, the last two being almost equally effective. In the presence of CPT-cAMP, mucosal NO3- had minimal influence on tissue conductance, whereas the effects of I- and SCN- were essentially unchanged. Br- on the mucosal side could substitute for Cl- under all conditions. The results suggest that protein phosphorylation by supramaximal concns. of cAMP induces maximal conductance through anion-specific routes, while the voltage sensitivity of this pathway is lost. The effects of theophylline and IBMX on the voltage-activated Cl- conductance of toad skin cannot be explained solely by inhibition of the phosphodiesterase.
OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

L8 ANSWER 51 OF 221 MEDLINE on STN
ACCESSION NUMBER: 1996098635 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8531927
TITLE: The size heterogeneity of human lysyl oxidase mRNA is due to alternate polyadenylation site and not alternate exon usage.
AUTHOR: Boyd C D; Mariani T J; Kim Y; Csiszar K
CORPORATE SOURCE: Department of Surgery, UMDNJ-Robert Wood Johnson Medical School New Brunswick, NJ 08903, USA.
CONTRACT NUMBER: HL37488 (United States NHLBI NIH HHS)
HL39869 (United States NHLBI NIH HHS)

HL42798 (United States NHLBI NIH HHS)
SOURCE: Molecular biology reports, (1995) Vol. 21, No. 2, pp. 95-103.
Journal code: 0403234. ISSN: 0301-4851. L-ISSN: 0301-4851.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-U22384
ENTRY MONTH: 199602
ENTRY DATE: Entered STN: 20 Feb 1996
Last Updated on STN: 20 Feb 1996
Entered Medline: 1 Feb 1996

AB We have isolated the entire gene coding for human lysyl oxidase. Coding and untranslated domains of human lysyl oxidase mRNA were found in 7 exons, distributed throughout approximately 14 kb of human genomic DNA. The appearance of exon sequences in lysyl oxidase mRNA in several human tissues was determined using a reverse transcriptase - PCR assay. In contrast to a previous report, this analysis has unambiguously shown that the size heterogeneity of lysyl oxidase mRNA was not due to alternate usage of any of the exons of the lysyl oxidase gene. Moreover, DNA sequence analysis of the entire 3.8 kb 3'-untranslated region (UTR) within exon 7 revealed multiple poly-adenylation sites which were shown to be differentially expressed in human skin fibroblasts. This differential usage of polyadenylation sites within the 3'-UTR explains the appearance of multiple lysyl oxidase mRNAs of different sizes.

L8 ANSWER 52 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1996:47115 CAPLUS
DOCUMENT NUMBER: 124:164728
ORIGINAL REFERENCE NO.: 124:30247a,30250a
TITLE: Improved preservation of saphenous vein grafts by the use of glyceryl trinitrate-verapamil solution during harvesting
AUTHOR(S): Roubos, Nick; Rosenfeldt, Franklin L.; Richards, Stephen M.; Convers, Robert A. J.; Davis, Bruce B.
CORPORATE SOURCE: Baker Medical Research Institute, Melbourne, 3181, Australia
SOURCE: Circulation, Supplement (1995), 92(9), 31-6
CODEN: CISUAQ; ISSN: 0069-4193
PUBLISHER: American Heart Association
DOCUMENT TYPE: Journal
LANGUAGE: English

AB High-pressure distension during harvesting damages the saphenous vein (SV) and may contribute to subsequent coronary artery bypass graft (CABG) occlusion. Application of vasodilator agents to the SV during harvesting may reduce the need for high-pressure distension and improve graft quality. We tested the effects of a vasodilator solution containing glyceryl trinitrate and verapamil (GV) or the conventional agent papaverine (Pap) on the pressure necessary to overcome SV spasm and on the structure and biochem. of the SV graft. Thirty-six patients undergoing CABG were randomly allocated to receive an application of either topical and intraluminal GV solution, topical Pap, or topical and intraluminal Ringer's solution (untreated) to the SV during harvesting. The peak and mean pressures required to distend the vein were recorded. Samples of SV were taken for microscopy and biochem. anal. just before we performed the anastomosis. The percentage of endothelial coverage was calculated by area measurements of stained en face prepns. of the vein intima. The results for peak pressures (mm Hg) were: untreated, 479.2±27.5; Pap, 384.8±29.0; and GV, 309.5±28.3 (P<.001, GV plus Pap vs. untreated); and the results for mean pressures (mm Hg) were untreated,

136.2±9.6; Pap, 102.2±10.8; and GV, 98.0±8.3 (P<.01, GV plus Pap vs. untreated). The results for endothelial cover (%) were: untreated, 43.7±7.0; Pap, 44.1±9.2; and GV, 68.7±7.0 (P<.05, GV vs. Pap); and the results for ATP (nmol/g wet weight) were: untreated, 67.3±12.7; Pap, 112.0±19.4; and GV, 132.5±22.7 (P<.05, GV plus Pap vs. untreated). Pharmacol. treatment of SV during harvesting, especially with GV solution, allows the use of a lower distension pressure and reduces the breakdown of high-energy phosphates in the vein wall. Topical and intraluminal use of GV solution during vein harvesting improves endothelial coverage compared with the topical use of Pap or no pharmacol. treatment.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 53 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:491352 CAPLUS
DOCUMENT NUMBER: 121:91352
ORIGINAL REFERENCE NO.: 121:16267a,16270a
TITLE: Skin cosmetics for rough skin and wound healing
INVENTOR(S): Sasaki, Ichiro; Koide, Chiharu; Suzuki, Tomeyoshi; Asano, Arata
PATENT ASSIGNEE(S): Kosei Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06128140	A	19940510	JP 1992-278841	19921016 <--
JP 3172599	B2	20010604		

PRIORITY APPLN. INFO.: JP 1992-278841 19921016

AB Skin cosmetics for rough skin and wound healing consist of (A) Asparagus officinalis extract (containing saponins) and (B) substances such as ATP and royal jelly. The prepns. activated skin cells, and, as a result, improved the rough skin, and promoted wound healing. A lotion contained ethoxylated castor oil 1.0, ethanol 10.0, preservatives 0.1, Asparagus officinalis extract 1.0, Lactobacillus extract 0.5 sorbitol 3.0, field horsetail extract 0.1, Na pyrrolidonecarboxylate 3.0%, perfumes, and water.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 54 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:280325 CAPLUS
DOCUMENT NUMBER: 120:280325
ORIGINAL REFERENCE NO.: 120:49399a,49402a
TITLE: Pharmaceuticals for treatment of skin disorders
INVENTOR(S): Sasaki, Ichiro; Suzuki, Tomeyoshi; Kuribayashi, Satsuki; Hayashi, Akinobu
PATENT ASSIGNEE(S): Kosei Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 06065041 A 19940308 JP 1992-217860 19920817 <--
JP 3413220 B2 20030603
PRIORITY APPLN. INFO.: JP 1992-217860 19920817
AB A pharmaceutical for treatment of wound and skin disorders consists of (1) ≥ 1 plant exts. isolated from Rosa rugosa, Chaenomeles lagenaria and Prunus japonica, and (2) ≥ 1 material selected from the group comprising yeast extract, Lactobacillus extract, Bifidobacterium extract, bovine blood extract, bovine spleen extract, reindeer muscle enzymic degradation products, chicken crown enzymic degradation products, royal jelly, pearl protein extract, ATP, ADP, AMP, succinic acid and derivs. thereof.
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 55 OF 221 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN DUPLICATE 19
ACCESSION NUMBER: 1994232352 EMBASE
TITLE: Effect of prochlorperazine as a sensitizer of rat skin on radiation-induced AMP metabolism.
AUTHOR: Hasan, S.S., Dr. (correspondence); Joshi, A.
CORPORATE SOURCE: School of Sciences, Indira Gandhi National Open Univ., New Delhi 110068, India.
SOURCE: Radiologia Medica, (1994) Vol. 87, No. 6, pp. 837-846.
ISSN: 0033-8362 CODEN: RAMEAN
COUNTRY: Italy
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical and Experimental Biochemistry
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English; Italian
ENTRY DATE: Entered STN: 26 Aug 1994
Last Updated on STN: 26 Aug 1994
AB The role of AMP was investigated in radiosensitization by the use of prochlorperazine in normal rat skin. AMP metabolism was evaluated by estimating the level of activities of 5' nucleotidase vis-a-vis protein, DNA and RNA contents in prochlorperazine-treated plus irradiated skin. To study radiation-induced changes in the skin, the extent of lipid peroxidation was measured in terms of enzyme lipid peroxidase. After irradiation, lipid peroxidase activity was observed to increase in prochlorperazine-treated rat skin. Subsequently the level of 5' nucleotidase was found to decrease in drug-treated plus irradiation skin. Similarly, the suppression in the levels of DNA, RNA and protein contents increased when the rat skins was irradiated in the presence of sensitizer prochlorperazine. The cytological examination, which revealed the extent of the lesions occurring in the normal rat skin, and the biochemical examination demonstrated increased cellular lethality in prochlorperazine-sensitized skin after irradiation. The results suggest that prochlorperazine probably sensitizes the normal skin tissues to radiation by inhibiting AMP metabolism via hydroxy-radical-induced decrease in DNA, RNA and protein metabolism.

L8 ANSWER 56 OF 221 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1995006209 EMBASE
TITLE: Recognition and treatment of shingles.
AUTHOR: Nikkels, Arjen F.; Pierard, Gerald E., Dr. (correspondence)
CORPORATE SOURCE: Department of Dermatopathology, University of Liege, Liege, Belgium.
AUTHOR: Pierard, Gerald E., Dr. (correspondence)
CORPORATE SOURCE: Department of Dermatopathology, CHU du Sart Tilman, B-4000

Liege, Belgium.
SOURCE: Drugs, (Oct 1994) Vol. 48, No. 4, pp. 528-548.
Refs: 221
ISSN: 0012-6667 CODEN: DRUGAY
COUNTRY: New Zealand
DOCUMENT TYPE: Journal; General Review; (Review)
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
038 Adverse Reactions Titles
037 Drug Literature Index
030 Clinical and Experimental Pharmacology
026 Immunology, Serology and Transplantation
013 Dermatology and Venereology
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 18 Jan 1995
Last Updated on STN: 18 Jan 1995

AB Varicella zoster virus (VZV) is responsible for a primary infection (varicella) followed by a latency, eventually resulting in herpes zoster (shingles). The replication cycle of VZV is normally interrupted after varicella. Consequently, VZV remains dormant in the organism. Reactivation occurs after viraemia, and the development of tissue alterations (skin and viscera) depends on the immunological status of the patient. Diagnosis of herpes zoster relies on clinical recognition and cytological and histological evaluations combined with immunohistochemistry and molecular biology techniques. Treatment of herpes zoster primarily relies upon antiviral drugs and incidentally on immunomodulating agents, specific immunoglobulins, antimicrobial agents, antiviral enzymes and corticosteroids. Drugs with a clinically relevant activity against varicella zoster virus infections include aciclovir, adenosine monophosphate, bromodeoxyuridine, desciclovir, fiacitabine, idoxuridine, interferon-α and vidarabine. Among them, aciclovir appears to be a first-line agent. Its efficacy has been well established by many clinical studies. Promising drugs for the future include famciclovir, penciclovir, valaciclovir and other molecules currently under investigation. Recent and promising improvements in antiviral drug development may increase patient compliance, cost-benefit ratios and therapeutic efficacy.

L8 ANSWER 57 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 20
ACCESSION NUMBER: 1994:61938 CAPLUS
DOCUMENT NUMBER: 120:61938
ORIGINAL REFERENCE NO.: 120:11077a,11080a
TITLE: Skin creams containing protein complexes and dimethylsilanoyl hyaluronate complex
INVENTOR(S): Mausner, Jack
PATENT ASSIGNEE(S): Chanel, Inc., USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5254331	A	19931019	US 1991-758768	19910912 <--

PRIORITY APPLN. INFO.: US 1991-758768 19910912
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A skin cream contains (1) a protein complex comprising serum proteins and hydrolyzed animal proteins 5.1-6.9; (2) a protein-amino

acid-vitamin-nucleotide complex comprising propylene glycol, serum proteins, niacinamide, water, adenosine phosphate, and arginine 3.4-4.6; and (3) dimethylsilanoyl hyaluronate complex 5.10-6.9%. The cream improves skin firmness and elasticity, counteracts skin dryness, and prevents skin wrinkles.

OS.CITING REF COUNT: 27 THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (27 CITINGS)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 58 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:525183 CAPLUS
DOCUMENT NUMBER: 119:125183
ORIGINAL REFERENCE NO.: 119:22335a,22338a
TITLE: Aqueous synthetic organ extracts
PATENT ASSIGNEE(S): Schuelke und Mayr G.m.b.H., Germany
SOURCE: Ger. Offen., 23 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4139639	A1	19930603	DE 1991-4139639	19911202 <--
WO 9310802	A1	19930610	WO 1992-DE1028	19921202 <--
W: JP, US				
EP 552516	A1	19930728	EP 1992-250349	19921202 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
JP 06506000	T	19940707	JP 1993-509719	19921202 <--

PRIORITY APPLN. INFO.:

DE 1991-4139639	A	19911202
DE 1992-4227633	A	19920818
WO 1992-DE1028	W	19921202

AB Aqueous synthetic organ exts. are prepared which have an activity spectrum comparable to that of the corresponding natural organ extract, but without the side effects due to the presence of pathogen or virus proteins, protein degradation products, and hormones. The synthetic exts. contain amino acids, peptides, nucleotides, carbohydrates, C3-6 aliphatic carboxylic acids, C2-7 aliphatic and/or aromatic alcs., and optionally vitamins, mineral salts and/or trace elements, buffers, and preservatives. Prepns. of synthetic placenta, serum, spleen, thymus, and connective tissue exts. and collagen hydrolyzate are cited as examples. The exts. are useful in cosmetics, to stimulate wound healing, immunity, and cell metabolism, and for treatment of digestive tract disorders, especially ulcers.

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L8 ANSWER 59 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:468927 CAPLUS
DOCUMENT NUMBER: 119:68927
ORIGINAL REFERENCE NO.: 119:12385a,12388a
TITLE: Valinomycin pretreatment induces LDL receptor activity in cultured human cells
AUTHOR(S): Nield, Heather; Middleton, Bruce
CORPORATE SOURCE: Med. Sch., Nottingham Univ., Nottingham, NG7 2UH, UK
SOURCE: Biochemical Society Transactions (1993), 21(2), 131S
CODEN: BCSTB5; ISSN: 0300-5127
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Valinomycin (10 μM) markedly stimulated [125I]-LDL to receptors in

vascular smooth muscle cells, skin and lung fibroblasts, and HepG2 cells. The stimulatory effect was independent of significant changes in 5'-AMP concentration The possible mechanism of the LDL receptor binding stimulation by valinomycin is discussed.

L8 ANSWER 60 OF 221 MEDLINE on STN DUPLICATE 21
ACCESSION NUMBER: 1993063872 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1436497
TITLE: Peripheral vibration causes an adenosine-mediated postsynaptic inhibitory potential in dorsal horn neurons of the cat spinal cord.
AUTHOR: De Koninck Y; Henry J L
CORPORATE SOURCE: Department of Physiology, McGill University, Montreal, Quebec, Canada.
CONTRACT NUMBER: 13460 (Canada Canadian Institutes of Health Research)
SOURCE: Neuroscience, (1992 Sep) Vol. 50, No. 2, pp. 435-43.
Journal code: 7605074. ISSN: 0306-4522. L-ISSN: 0306-4522.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199212
ENTRY DATE: Entered STN: 22 Jan 1993
Last Updated on STN: 3 Feb 1997
Entered Medline: 1 Dec 1992
AB We have previously reported a vibration-induced, adenosine-mediated inhibition of nociceptive dorsal horn neurons in the cat spinal cord. The present study was conducted to investigate the mechanisms of this inhibition. In vivo intracellular recording was obtained from dorsal horn neurons in the lower lumbar segments of the anaesthetized cat. Vibration (80-250 Hz for 2-3 s every 15-20 s) was applied to the glabrous skin of the toes of the hind foot using a feedback-controlled mechanical stimulator. In 32 of 43 neurons tested, vibration produced a pronounced hyperpolarization of the membrane potential. This hyperpolarization peaked at -10 mV and decayed throughout the period of the application of vibration. It was associated with a decrease in membrane resistance, had a reversal potential negative to the resting membrane potential and was Cl(-)-independent, suggesting that it was due to an increase in a K+ conductance, properties typical of the response to adenosine. This inhibitory postsynaptic potential was unaffected by intravenous administration of bicuculline, strychnine and naloxone but was blocked by iontophoretic administration of 8-sulphophenyltheophylline, a P1-purinergic receptor antagonist. These results confirm our previous finding that vibration-induced inhibition of nociceptive dorsal horn neurons is mediated via the release of an endogenous purine compound and further suggests that this inhibition involves a postsynaptic inhibitory mechanism.

L8 ANSWER 61 OF 221 MEDLINE on STN
ACCESSION NUMBER: 1993033963 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1357877
TITLE: A defective purine nucleotide synthesis pathway in psoriatic patients.
AUTHOR: Kiehl R; Ionescu G
CORPORATE SOURCE: Research Department, Spezialklinik Neukirchen, Germany.
SOURCE: Acta dermato-venereologica, (1992 Aug) Vol. 72, No. 4, pp. 253-5.
Journal code: 0370310. ISSN: 0001-5555. L-ISSN: 0001-5555.
PUB. COUNTRY: Sweden
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199211
ENTRY DATE: Entered STN: 22 Jan 1993
Last Updated on STN: 6 Feb 1995
Entered Medline: 23 Nov 1992

AB Purine nucleotide concentrations in skin- and blood-cells of psoriatic patients are abnormal: The increase in the steady state level of cGMP and the decrease in the cAMP concentrations are associated with an enhanced rate of cellular proliferation. Concomitantly we found in the present study decreased ADP and ATP concentrations in blood cells (p less than 0.0001). The change in nucleotide concentrations suggests a defective purine nucleotide synthesis pathway. Stimulation of the Krebs cycle with fumaric acid raises ATP (p less than 0.0001) and most probably cAMP levels and at the same time slows down the purine nucleotide synthesis through end-product inhibition. Both effects can inhibit DNA and protein synthesis activity, which results in inhibition of cellular proliferation. Fumaric acid seems therefore a useful treatment for psoriatic lesions if liver and kidney functions (purine nucleotide and urea cycle) are controlled during treatment.

L8 ANSWER 62 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:91422 CAPLUS
DOCUMENT NUMBER: 116:91422
ORIGINAL REFERENCE NO.: 116:15385a,15388a
TITLE: Topical preparations containing kojic acid (derivatives) and ATP, ADP, AMP, succinic acid, and/or their derivatives
INVENTOR(S): Suzuki, Tomeyoshi; Tanaka, Takanori; Kondo, Takeshi
PATENT ASSIGNEE(S): Kobayashi Kose Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03236320	A	19911022	JP 1990-29818	19900209 <--
JP 2844103	B2	19990106		
PRIORITY APPLN. INFO.:			JP 1990-29818	19900209
OTHER SOURCE(S):		MARPAT 116:91422		

AB Topical prepns., useful as wound healing promoters or cosmetics, contain (1) kojic acid (I) and/or its derivs. and (2) ATP, ADP, AMP, succinic acid, and/or their derivs. The prepns. show synergistic wound healing promotion. A physiol. saline containing 1.0 weight% I and 0.1 weight% ATP was applied to wounds on rat skin twice a day for 1 wk to show 142% wound healing rate (when 100% is for physiol. saline), vs. 109% and 111%, for a physiol. saline containing I and ATP themselves, resp. Stearic acid 18.0, cetanol 4.0, triethanolamine 2.0, glycerin 5.0, I 1.0, ADP 1.0, Kankohso 401 0.002, lysozyme.HCl 1.0, and H2O to 100 weight% were mixed to give an ointment.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 63 OF 221 USPATFULL on STN
ACCESSION NUMBER: 91:79784 USPATFULL
TITLE: Cosmetic preparations for promoting trophism of the skin and of related hair follicles
INVENTOR(S): Gazzani, Giovanni, Appiano Gentile, Italy

PATENT ASSIGNEE(S): Crinos Industria Farmacobiologica S.p.A., Como, Italy (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5053230		19911001	<--
APPLICATION INFO.:	US 1987-133199		19871215 (7)	

RELATED APPLN. INFO.: Continuation of Ser. No. US 1983-545674, filed on 25 Oct 1983, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	IT 1982-23944	19821029
	IT 1983-22047	19830713

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rosen, Sam
LEGAL REPRESENTATIVE: McAulay Fisher Nissen Goldberg & Kiel
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 514
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A cosmetic preparation is described as comprising at least an effective amount of a nutrient medium for the in vitro culture of isolated human epithelial cells and a related amount of serum of bovine fetus. The preparation is particularly active as a revitalizing agent for the skin, as an anti-wrinkle agent and as a factor for enhancing hair growth. The activity of the aforesaid nutrient medium can be furthermore enhanced by adding extractive mixtures, obtained from the connective tissues of animal organs, mainly mucopolysaccharides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 64 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1991:522064 BIOSIS
DOCUMENT NUMBER: PREV199192133524; BA92:133524
TITLE: ARTERIOLAR VASODILATATION IN FROG SKELETAL MUSCLE IN-VIVO MODIFICATION OF SECOND MESSENGER SYSTEMS.
AUTHOR(S): FUGLSANG A [Reprint author]
CORPORATE SOURCE: C/O PROFESSOR A V SOMLYO, DEP PHYSIOL, UNIV VA, BOX 449, CHARLOTTESVILLE, VA 22908, USA
SOURCE: Experimental Physiology, (1991) Vol. 76, No. 5, pp. 799-806.
CODEN: EXPHEZ. ISSN: 0958-0670.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 19 Nov 1991
Last Updated on STN: 20 Nov 1991

AB This study was concerned with the role of cyclic nucleotides in the post-junctional vasodilatation mechanism. Interventions with second messenger systems involving cyclic adenosine monophosphate (cyclic AMP) and cyclic guanosine monophosphate (cyclic GMP), allowed the role of these nucleotides in vascular smooth muscle to be evaluated in the autoperfused, transparent frog muscle, m. cutaneous pectoris. The microcirculation was observed by intravital microscopy, and arteriolar diameters were continuously recorded. Pre- and post-junctional effects were distinguished by comparing results in control frogs with those obtained in frogs that had been chemically sympathectomized with either 6-hydroxydopamine or tetrodotoxin. Arterioles that were pre-contracted with adrenaline dilated in response to topical application of

forskolin or sodium nitroprusside, which are direct activators of intracellular adenylate cyclase and guanylate cyclase, respectively. Arterioles were also dilated by 3-isobutyl-1-methylxanthine (IBMX), which is a non-selective inhibitor of cyclic AMP- and cyclic GMP-phosphodiesterase, and by rolipram, which is a selective inhibitor of the calcium-independent cyclic AMP-phosphodiesterase. Dibutyryl-cyclic AMP and dibutyryl-cyclic GMP also caused vasodilatation. These results indicate that in vascular smooth muscle, intracellular mechanisms involving cyclic nucleotides (cyclic AMP and cyclic GMP) are important in vasodilatation. They may act in conjunction with pre-junctional inhibitory mechanisms on sympathetic nerves.

L8 ANSWER 65 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:35030 CAPLUS
DOCUMENT NUMBER: 116:35030
ORIGINAL REFERENCE NO.: 116:5841a,5844a
TITLE: Neurotrophin acting on brain damage induced by platelet and leukocyte activation
AUTHOR(S): Gabrielyan, E. S.; Akopov, S. E.; Grigoryan, M. R.; Tumasyan, K. S.
CORPORATE SOURCE: Dep. Pharmacol., Yerevan Med. Inst., Yerevan, USSR
SOURCE: Byulleten Eksperimental'noi Biologii i Meditsiny (1991), 112(10), 391-3
CODEN: BEBMAE; ISSN: 0365-9615
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The effects of neurotrophin, an extract from the skin of rabbits infected with vaccinia virus, on brain embolism induced by intra-arterial phorbol ester (PMA) injections were studied in anesthetized cats. PMA induced massive microcirculatory blockade by thrombocytes and leukocytes. The resulting ischemia altered brain energy metabolism, especially in the cortex and caudate-putamen. The levels of lactate increased. Neurotrophin had a protective effect.

L8 ANSWER 66 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 22
ACCESSION NUMBER: 1991:160418 BIOSIS
DOCUMENT NUMBER: PREV199191086218; BA91:86218
TITLE: GLUTAMINE METABOLISM IN SKELETAL MUSCLE OF SEPTIC RATS.
AUTHOR(S): ARDAWI M S M [Reprint author]; MAJZOUB M F
CORPORATE SOURCE: PO BOX 9029, JEDDAH 21413, SAUDI ARABIA
SOURCE: Metabolism Clinical and Experimental, (1991) Vol. 40, No. 2, pp. 155-164.
CODEN: METAAJ. ISSN: 0026-0495.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 1 Apr 1991
Last Updated on STN: 2 Apr 1991
AB The metabolism of skeletal muscle glutamine was stuided in rats made septic by cecal ligation and puncture technique. Blood glucose was not significantly different in septic rats, but lactate, pyruvate, glutamine, and alanine were markedly increased. Conversely, blood ketone body concentrations were markedly decreased in septic rats. Both plasma insulin and glucagon were markedly elevated in septic rats. Sepsis increased the rates of glutamine production in muscle, but without marked effects on skin and adipose tissue preparations, with muscle production accounting for over 87% of total glutamine produced by the hindlimb. Sepsis produced decreases in the concentrations of skeletal muscle glutamine, glutamate, 2-oxoglutarate, and adenosine monophosphate (AMP). The concentrations of ammonia, pyruvate, and inosine monophosphate

(IMP) were increased. Hindlimb blood flow showed no marked change in response to sepsis, but was accompanied by an enhanced net release of glutamine and alanine. The maximal activity of glutamine synthetase was increased only in quadriceps muscles of septic rats, whereas that of glutaminase was decreased in all muscles studied. Tyrosine release from incubated muscle preparation was markedly increased in septic rats; however, its rate of incorporation was markedly decreased. It is concluded that there is an enhanced rate of production of glutamine from skeletal muscle of septic rats. This may be due to change in efflux and/or increased intracellular formation of glutamine; these suggestions are discussed.

L8 ANSWER 67 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 23
ACCESSION NUMBER: 1990:617811 CAPLUS
DOCUMENT NUMBER: 113:217811
ORIGINAL REFERENCE NO.: 113:36689a,36692a
TITLE: Skin-protectant compositions comprising nucleic acids, nucleotides and nucleosides
INVENTOR(S): Pauly, Georges; Pauly, Gilles; Pauly, Marc
PATENT ASSIGNEE(S): Laboratoires Serobiologiques S. A., Fr.
SOURCE: Fr. Demande, 53 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2634374	A1	19900126	FR 1988-9747	19880719 <--
FR 2634374	B1	19931015		
WO 9000894	A1	19900208	WO 1989-FR377	19890717 <--
W: CH, DE, GB, LU, NL, US				
NL 8920746	A	19900601	NL 1989-20746	19890717 <--
DE 3990820	T0	19900719	DE 1989-3990820	19890717 <--
DE 3990820	C2	20010215		
CH 682453	A5	19930930	CH 1990-1099	19890717 <--
GB 2233557	A	19910116	GB 1990-6119	19900319 <--
GB 2233557	B	19930331		

PRIORITY APPLN. INFO.: FR 1988-9747 A 19880719
WO 1989-FR377 A 19890717

AB A photoprotectant and cytophotoprotectant composition for the skin comprises nucleic acids, nucleotides or their salts, and nucleosides. The salts are with inorg. or organic bases and with basic amino acids or peptides. The compns. protect the skin cells, especially the Langerhans cells against the noxious effects of light. The compns. may also comprise amino acids and/or protein hydrolyzates. A powdery composition comprised histidine ribonucleate 31.65, cytidine-thymidine-uridine mixture 16.65, histidine-HCl 18.33, and anhydrous collagen hydrolyzate 33.37 (no units). RNA K salt (1%) protected human Langerhans cells, in vitro, against the noxious effect of UV light, as shown by the preservation of HLA-DR+ specific sites.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 68 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 24
ACCESSION NUMBER: 1990:402641 CAPLUS
DOCUMENT NUMBER: 113:2641
ORIGINAL REFERENCE NO.: 113:539a,542a
TITLE: Studies on chemical protectors against radiation.

XXVIII. Protective effect of nucleic acid constituents on radiation damage induced by x-irradiation
AUTHOR(S): Sato, Yushi; Ohta, Setsuko; Shinoda, Masato
CORPORATE SOURCE: Fac. Pharm. Sci., Hoshi Univ., Tokyo, 142, Japan
SOURCE: Yakugaku Zasshi (1990), 110(3), 210-17
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB The effects of various nucleic acid constituents, i.e., bases, nucleosides, and nucleotides on lethality and skin injury induced by soft x-irradiation were studied in ICR mice. The survival effect was determined by use of survival days after irradiation of LD of 70 kVp, 2100 R and the protective effect on skin injury was determined by use of degrees of skin injury after 30 kVp, 1100 R soft x-irradiation The survival effect was observed by a single injection of inosine at 120, 60, and 5 min before irradiation and by injection 3 times after irradiation The other nucleic acid constituents had no effect on survival. The protective effect for skin injury was observed by a single injection of adenosine, guanosine, inosine, 5'-AMP, 5'-GMP, and 5'-IMP before irradiation The protective effect for skin injury by injection 3 times before irradiation was shown by adenosine, inosine, 5'-AMP, and 5'-IMP. A relationship between radical scavenging activities and the protective effect from radiation by various nucleosides was not observed
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 69 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1992:82391 CAPLUS
DOCUMENT NUMBER: 116:82391
ORIGINAL REFERENCE NO.: 116:14019a,14022a
TITLE: Change of nucleotides and proteins in fish soup stock by heating
AUTHOR(S): Tajima, Mariko
CORPORATE SOURCE: Educ. Coll., Kagoshima Univ., Kagoshima, Japan
SOURCE: Kagoshima Daigaku Kyoikugakubu Kenkyu Kiyo, Shizen Kagaku Hen (1990), 42, 43-50
CODEN: KDSHA6; ISSN: 0389-6692
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB During cooking of fish (mackerel [Scomber japonicus] and Parapristipoma trilineatum) soup, .apprx.70% of IMP was transferred from the meat into the water solution within the initial 15 min. The contents of ATP, ADP, AMP, IMP, inosine, and hypoxanthine in the meat of the 2 fish are tabulated. Proteins were also transferred from fish into the water solution Proteins released from fish meat were mostly of mol. wts. .apprx.40,000; fish skin and bone released proteins of mol. wts. .apprx.100,000 and .apprx.200,000. Fish skin released the highest amount of low-mol.-weight compds., fish meat released less, and fish bone the least.

L8 ANSWER 70 OF 221 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN DUPLICATE 25
ACCESSION NUMBER: 1989137304 EMBASE
TITLE: Inhibition of prolyl hydroxylase by poly(ADP-ribose) and phosphoribosyl-AMP. Possible role of ADP-ribosylation in intracellular prolyl hydroxylase regulation.
AUTHOR: Hussain, M.Z.; Ghani, Q.P.; Hunt, T.K.
CORPORATE SOURCE: Department of Stomatology, School of Dentistry, University of California, San Francisco, CA 94143, United States.
SOURCE: Journal of Biological Chemistry, (1989) Vol. 264, No. 14, pp. 7850-7855.
ISSN: 0021-9258 CODEN: JBCHA3

COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical and Experimental Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 12 Dec 1991
Last Updated on STN: 12 Dec 1991

AB Poly(ADP-ribose) prepared by incubating NAD+ with rat liver nuclei inhibited the hydroxylation reaction catalyzed by purified prolyl hydroxylase (proline, 2-oxoglutarate dioxygenase, EC 1.14.11.2) in vitro. Near complete inhibition of the enzyme was seen in the presence of 6 nM (ADP-Rib)18 with a K(i(app)) of 1.5 nM. The monomer unit of poly(ADP-ribose), adenosine diphosphoribose (ADP-Rib), was found to be a weak inhibitor. On the other hand, poly(ADP-ribose)-derived phosphoribosyl-AMP (PRib-AMP) and its dephosphorylated product, ribosyl-ribosyl-adenine (Rib-RibA), inhibited the enzyme in nanomolar concentrations (K(i(app)) 16.25 nM). The order of inhibition was (ADP-Rib)18 > PRib-AMP, Rib-RibA >> ADP-Rib. These results suggested that the 1'→2' ribosyl-ribosyl moiety in these compounds was involved in the inhibition of the enzyme. The possibility that intracellular prolyl hydroxylase is regulated by the involvement of ADP-ribosylation reactions was examined in confluent cultures of skin fibroblast treated with 20 mM lactate. The activity of prolyl hydroxylase was stimulated by 145% over that of untreated cultures. In the lactate-treated cells, the level of NAD+ was lowered and the total ADP-ribosylation of cellular proteins reduced by 40%. These observations imply that the lactate-induced activation of cellular prolyl hydroxylase is mediated by a reduction in ADP-ribosylation and that the synthesis and degradation of ADP-ribose moiety(ies) may possibly regulate prolyl hydroxylase activity in vivo.

L8 ANSWER 71 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 26

ACCESSION NUMBER: 1989:518102 BIOSIS
DOCUMENT NUMBER: PREV198988134245; BA88:134245
TITLE: WHEAL-AND-FLARE RESPONSES TO INTRADERMALLY INJECTED AMP HYPERTONIC SALINE AND HISTAMINE COMPARISON OF ATOPIC AND NONATOPIC SUBJECTS.
AUTHOR(S): DJUKANOVIC R [Reprint author]; FINNERTY J P; HOLGATE S T
CORPORATE SOURCE: IMMUNOPHARMACOL GROUP, MED-1, SOUTHAMPTON GEN HOSP, TREMONA RD, SOUTHAMPTON SO9 4XY, ENGLAND, UK
SOURCE: Journal of Allergy and Clinical Immunology, (1989) Vol. 84, No. 3, pp. 373-378.
CODEN: JACIBY. ISSN: 0091-6749.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 15 Nov 1989
Last Updated on STN: 21 Nov 1989

AB Adenosine 5'-monophosphate (AMP) in increasing concentrations, and saline solutions of corresponding tonicity, were injected intradermally in seven atopic and seven normal subjects. Skin wheal-and-flare responses were elicited in a dose-dependent fashion in all subjects, and no difference was found between responses produced by AMP and responses produced by saline of corresponding tonicity. Also, no difference in response to AMP and saline was found between atopic and nonatopic subjects. We further investigated, in seven atopic subjects, whether the skin wheal-and-flare response to the single, highest dose of AMP, saline, and histamine could be inhibited by preadministration of 180 mg of terfenadine, a potent H1 antagonist. A significant inhibition of the wheal-and-flare response to histamine and no significant inhibition to AMP were found. There was a significant inhibition of the flare response

caused by hypertonic saline but no inhibition of the wheal response. We interpret these findings as indicating that AMP does not specifically lead to mast cell degranulation in the skin and that there are functional differences between cutaneous and lung mast cells. The observation that terfenadine significantly inhibited the flare response to hypertonic saline suggests that this stimulus produced histamine release.

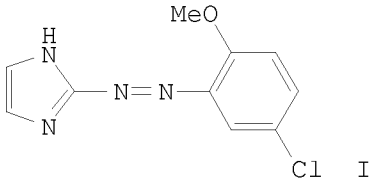
L8 ANSWER 72 OF 221 EMBASE

ACCESSION NUMBER: 1989126982 EMBASE
TITLE: Postherpetic neuralgia.
AUTHOR: Watson, C.P.N.
CORPORATE SOURCE: Department of Medicine, Irene Eleanor Smythe Pain Clinic, University of Toronto, Toronto, Ont. M5G 2C4, Canada.
SOURCE: Neurologic Clinics, (1989) Vol. 7, No. 2, pp. 231-248.
ISSN: 0733-8619 CODEN: NECLEG
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review; (Review)
FILE SEGMENT: 037 Drug Literature Index
050 Epilepsy Abstracts
008 Neurology and Neurosurgery
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 12 Dec 1991
Last Updated on STN: 12 Dec 1991

AB Postherpetic pain persisting 1 month or longer occurs in only a small percentage of all patients with herpes zoster. In most patients, PHN tends to diminish with time. The incidence is, however, directly related to age. Any therapeutic claim for prophylaxis or treatment of PHN has to be evaluated with these observations in mind. There is some information about the pathologic features and a concept of the pathogenesis can be suggested. There is evidence for an imbalance in fiber input (reduced large, inhibitory fibers, and intact or increased small, excitatory fibers) to an abnormal dorsal horn that may contain hypersensitive neurons. Prevention of PHN remains difficult. There is evidence that systemic steroids exert a preventive effect when employed in the treatment of herpes zoster in the immunocompetent patient. A reasonable regimen is 60 mg of prednisone tapered over 10 to 14 days. One double-blind, controlled study supports the use of amantadine in this situation; this drug is an option in patients for whom steroids are contraindicated, such as those with peptic ulcer, diabetes mellitus or compromised immune function. The dosage of amantadine used in this study was 100 mg twice daily for a month. Although a number of other therapies have been suggested, these remedies remain in need of further, more scientific study. For established PHN, there is firm support for the reduction of pain from severe to mild in two thirds of patients administered low doses of amitriptyline followed by gradual, small increments. In the age group over 65 years, one may use as small a dose as 10 mg with an increase of 10 mg every 5 to 7 days. In those younger than 65, a dose of 25 mg to start is reasonable, with increments of 25 mg. Although unproved, the addition of a phenothiazine, such as fluphenazine, may provide further pain relief. Preliminary studies also indicate that topical capsaicin may be a useful new treatment. Although widely used, there is no good evidence for the use of anticonvulsants alone in this disorder. Studies of local anesthetic sprays with vibration and continuous TNES are uncontrolled, but these modalities may be of some merit. One uncontrolled study reported benefit from epidural steroids. DREZ lesions are a possibility in failed medical cases, but other surgical procedures appear to be of little or no use. Although the measures described here will benefit a number of patients, PHN remains an intractable problem in some cases. Therapies such as amantadine and epidural steroids need corroboration, and some of the older approaches, such as local anesthetic sprays, vibration, and

TENS, require further, more scientific study. Newer approaches are necessary, and one useful avenue may be the exploration of drugs related to or mimicking the action of tricyclic antidepressants. Topical capsaicin is a novel approach that shows promise in preliminary open-label trials and now requires a controlled study.

L8 ANSWER 73 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 27
ACCESSION NUMBER: 1989:608879 CAPLUS
DOCUMENT NUMBER: 111:208879
ORIGINAL REFERENCE NO.: 111:34459a,34462a
TITLE: Mechanisms involved in the effect of M6434 on experimental hemorrhagic shock: II. Effect on energy metabolism and organ blood flow
AUTHOR(S): Uemura, Akio; Dabasaki, Tatsuroh; Notsu, Tatsuto; Yamasaki, Fumiaki; Nakakuki, Masanori; Shimojo, Masato; Kosuzume, Hiroshi; Okada, Kazuo
CORPORATE SOURCE: Fuji Cent. Res. Lab., Mochida Pharm. Co., Ltd., Shizuoka, 412, Japan
SOURCE: Circulatory Shock (1989), 27(3), 183-91
CODEN: CRSHAG; ISSN: 0092-6213
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB The effects of M6434 (I) on survival time and hepatic energy metabolism in rats with hemorrhagic shock were examined I effects on rat mitochondrial respiration and regional blood flow were also studied to clarify its mechanism of antishock effects. I.v. infusion of I (3 or 10 μg/kg/min) prolonged the survival time of rats. At 10 μg/kg/min it suppressed the decline of ATP content and energy charge of the liver, shifted the blood flow distribution from skin and skeletal muscles to vital organs such as the liver and the heart, and increased cardiac output. The mitochondrial respiration was unaffected by I in vitro (10-6-10-5 M). The mechanism of the beneficial effect of I in shocked rats may not be based on the direct activation of energy metabolism, but rather on the redistribution of blood flow and increase in cardiac output.

L8 ANSWER 74 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1990:50559 CAPLUS
DOCUMENT NUMBER: 112:50559
ORIGINAL REFERENCE NO.: 112:8589a,8592a
TITLE: Pyrethroids effect on the respiratory metabolism and adenine nucleotides in the house cricket - Acheta domesticus
AUTHOR(S): Migula, Pavel; Kafel, Alina; Kedziorski, A.; Nakonieczny, Miroslav; Zebrowski, Zbignew
CORPORATE SOURCE: Siles. Univ., Katowice, Pol.
SOURCE: Zeszyty Problemowe Postepow Nauk Rolniczych (1989), 367, 63-81
CODEN: ZPPRAW; ISSN: 0084-5477
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The amplitude of fluctuations in O2 uptake rate over 24 h following topical application of a sublethal pyrethyroid dose (0.075 μg/cricket) was wider for Ripcord EC 10 than for Decis EC 2.5 and depended on sex. ATP, ADP, and AMP fluctuations also depended on pyrethyroid and sex and showed a higher stability of the adenylate energy coefficient in males. Decis more affected this coefficient in females than did Ripcord.

L8 ANSWER 75 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1989:421256 CAPLUS
DOCUMENT NUMBER: 111:21256
ORIGINAL REFERENCE NO.: 111:3683a,3686a
TITLE: An electrophysiological study of microvascular permeability and its modulation by chemical mediators
AUTHOR(S): Olesen, Soeren Peter
CORPORATE SOURCE: Panum Inst., Univ. Copenhagen, Copenhagen, Den.
SOURCE: Acta Physiologica Scandinavica, Supplementum (1989), 579, 28 pp.
CODEN: APSSAD; ISSN: 0302-2994
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The elec. resistance or conductance of endothelium recorded on single frog microvessels in vivo vary by ≥3 orders of magnitude from the tight brain endothelium (Rm = 1870 Ωcm2, Gm = 0.53 mS/cm2), where Rm is the elec. resistance and Gm the conductance of the endothelium, to the microvascular endothelium of skin (Rm = 24-70 Ωcm2, Gm = 14-42 mS/cm2), muscle (Rm = 23-36 Ωcm2, Gm = 28-43 mS/cm2), and mesentery (Rm = 1-3 Ωcm2, Gm = 0.33-1.0 S/cm2). K+ permeabilities calculated from the elec. conductances average 8.5 + 10-7, 3.4 + 10-5, 5.7 + 10-5, and 80 + 10-5 cm/s for brain, skin, muscle, and mesenteric microvessels, resp. Venules are 1.5-3-fold more permeable to ions than are arterioles. The ion permeabilities of capillaries are not much different from those of venules, and since the surface area of venules is comparable to that of capillaries, venules may be important exchange vessels for small solutes. The ion permeability of the frog blood-brain barrier is reversibly increased by various autacoids: serotonin, bradykinin, ATP, ADP, AMP, or LTC4. These receptor agonists all induce similar changes: permeability increases within 1-2 s after administration, rapidly peaks with values <2-fold the control value, and reverses at a much slower rate (5-15 min). This time course is similar to that of the increase in free intraendothelial Ca2+ concentration known to be induced by the agonists. Inhibition of the Ca2+-transient by the use of a Ca2+ blocker also inhibits the permeability increase induced by serotonin. A selective increase in the cytosolic Ca2+ concentration in endothelial cells mediated by ionophores A 23187 and ETH 1001 mimics the receptor agonist-induced permeability increase, further indicating that Ca2+ probably serves as a 2nd messenger in the endothelial permeability response. The permeability of frog brain vessels is increased by unknown mechanisms by free O radicals as well as by hypoxia, CN-, iodoacetate, phospholipase A2, arachidonic acid, protamine sulfate, unbound Evans blue dye, trypsin, neuraminidase, melittin, streptolysin O, and snake venoms. Frog brain venules respond to the same chemical stimuli as peripheral venules in mammals are known to do. The most common ion channel in cultured bovine aortic endothelial cell membranes is a 30-pS, K+-selective, inward rectifier channel, activated by hyperpolarization. The cells also express a muscarinic gated K+ current, which is independent of GTP-binding proteins. Finally, shear stress applied to endothelial cells grown in a laminar flow tube activates a different K+ current at shear stress levels similar to those found in arterioles in vivo. This mechanism may be involved in endothelium-dependent arteriolar relaxation.

L8 ANSWER 76 OF 221 TOXCENTER COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1989:139399 TOXCENTER
COPYRIGHT: Copyright 2010 ACS
DOCUMENT NUMBER: CA11103021256P
TITLE: An electrophysiological study of microvascular permeability and its modulation by chemical mediators
AUTHOR(S): Olesen, Soeren Peter
CORPORATE SOURCE: Panum Inst., Univ. Copenhagen, Copenhagen, Den..
SOURCE: Acta Physiologica Scandinavica, Supplementum, (1989) Vol. 579, pp. 28 pp..
CODEN: APSSAD. ISSN: 0302-2994.
COUNTRY: DENMARK
DOCUMENT TYPE: Journal
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 1989:421256
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Nov 2001
Last Updated on STN: 22 Oct 2002

AB The elec. resistance or conductance of endothelium recorded on single frog microvessels in vivo vary by ≥3 orders of magnitude from the tight brain endothelium (Rm = 1870 Ωcm2, Gm = 0.53 mS/cm2), where Rm is the elec. resistance and Gm the conductance of the endothelium, to the microvascular endothelium of skin (Rm = 24-70 Ωcm2, Gm = 14-42 mS/cm2), muscle (Rm = 23-36 Ωcm2, Gm = 28-43 mS/cm2), and mesentery (Rm = 1-3 Ωcm2, Gm = 0.33-1.0 S/cm2). K+ permeabilities calculated from the elec. conductances average 8.5 + 10-7, 3.4 + 10-5, 5.7 + 10-5, and 80 + 10-5 cm/s for brain, skin, muscle, and mesenteric microvessels, resp. Venules are 1.5-3-fold more permeable to ions than are arterioles. The ion permeabilities of capillaries are not much different from those of venules, and since the surface area of venules is comparable to that of capillaries, venules may be important exchange vessels for small solutes. The ion permeability of the frog blood-brain barrier is reversibly increased by various autacoids: serotonin, bradykinin, ATP, ADP, AMP, or LTC4. These receptor agonists all induce similar changes: permeability increases within 1-2 s after administration, rapidly peaks with values <2-fold the control value, and reverses at a much slower rate (5-15 min). This time course is similar to that of the increase in free intraendothelial Ca2+ concentration known to be induced by the agonists. Inhibition of the Ca2+-transient by the use of a Ca2+ blocker also inhibits the permeability increase induced by serotonin. A selective increase in the cytosolic Ca2+ concentration in endothelial cells mediated by ionophores A 23187 and ETH 1001 mimics the receptor agonist-induced permeability increase, further indicating that Ca2+ probably serves as a 2nd messenger in the endothelial permeability response. The permeability of frog brain vessels is increased by unknown mechanisms by free O radicals as well as by hypoxia, CN-, iodoacetate, phospholipase A2, arachidonic acid, protamine sulfate, unbound Evans blue dye, trypsin, neuraminidase, melittin, streptolysin O, and snake venoms. Frog brain venules respond to the same chemical stimuli as peripheral venules in mammals are known to do. The most common ion channel in cultured bovine aortic endothelial cell membranes is a 30-pS, K+-selective, inward rectifier channel, activated by hyperpolarization. The cells also express a muscarinic gated K+ current, which is independent of GTP-binding proteins. Finally, shear stress applied to endothelial cells grown in a laminar flow tube activates a different K+ current at shear stress levels similar to those found in arterioles in vivo. This mechanism may be involved in endothelium-dependent arteriolar relaxation.

L8 ANSWER 77 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1988:632404 CAPLUS
DOCUMENT NUMBER: 109:232404
ORIGINAL REFERENCE NO.: 109:38451a,38454a
TITLE: Functionalized siloxane-modified solids for HPLC

packings
INVENTOR(S): Kutsuna, Yutaka; Suhara, Tsuneo; Fukui, Hiroshi; Nakano, Masakyo; Ogawa, Takashi; Nakada, Okitsugu; Otsu, Yutaka
PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 46 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63171678	A	19880715	JP 1987-218	19870106 <--
JP 2573936	B2	19970122		

PRIORITY APPLN. INFO.: JP 1987-218 19870106

AB The title solids are prepared by treating solids with siloxanes, reacting the siloxanes with spacer compds. (functional group-containing compds.) and further modifying the functional groups of the spacer compds. Heating silica gel with tetramethylcyclotetrasiloxane at 90°, reacting with allyl glycidyl ether in oil bath at 80° for 6 h, and heating with 0.5N H2SO4 in oil bath at 100° gave OH-containing powder, which was packed into a HPLC column showing good separation of benzene-naphthalene-anthracene-2,3-benzanthracene mixture Other various functionalized powders prepared similarly showed good separation of acids, amines, amino acids, nucleotides and sugars. The powders are useful for cosmetics, separation of enzymes, antibodies, hormones and in EIA and RIA uses.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 78 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1988:516085 CAPLUS
DOCUMENT NUMBER: 109:116085
ORIGINAL REFERENCE NO.: 109:19249a,19252a
TITLE: Topical pharmaceuticals containing local anesthetics and nucleosides
INVENTOR(S): Frankhof, Wolfgang; Thiemer, Klaus
PATENT ASSIGNEE(S): Fed. Rep. Ger.
SOURCE: Ger. Offen., 5 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3701497	A1	19880728	DE 1987-3701497	19870120 <--
WO 8805299	A1	19880728	WO 1988-EP30	19880116 <--
W: AU, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU, US				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8811508	A	19880810	AU 1988-11508	19880116 <--
EP 297630	A1	19890104	EP 1988-200123	19880116 <--
R: ES, GR				
EP 363355	A1	19900418	EP 1988-901040	19880116 <--
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				

PRIORITY APPLN. INFO.: DE 1987-3701497 A 19870120
WO 1988-EP30 A 19880116

AB Topical pharmaceuticals contain 1-100 g/L local anesthetics,

1-100 g/L nucleosides, a preservative, and carriers. The nucleosides are selected from adenosine, guanosine, inosine, uridine, or their water-soluble mono-, di-, or triphosphates. A solution contained 10 mg/mL Mepivacaine·HCl (solution A). Another solution contained di-Na dihydrogenadenosine phosphate 6, adenosine diphosphoric acid 2, adenosine monophosphoric acid 2, guanosine monophosphoric acid 4, adenosine 10, guanosine 2, inosine 10, uridine 2, and chlorocresol 2 mg/mL (solution B). A patient suffering from a strained muscle was treated by infiltration with a 1:1 mixture containing solution A and solution B. The patient was free of pain within 4 days.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 79 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1989:5604 BIOSIS
DOCUMENT NUMBER: PREV198987005604; BA87:5604
TITLE: A STUDY OF IMMUNE REACTIVITY IN PATIENTS WITH ITCHING DERMATOSES.
AUTHOR(S): KHISHTOVANI E I [Reprint author]
CORPORATE SOURCE: TBILISI STATE MED INST, TBILISI, USSR
SOURCE: Soobshcheniya Akademii Nauk Gruzinskoi SSR, (1988) Vol. 129, No. 2, pp. 413-416.
ISSN: 0132-1447.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: RUSSIAN
ENTRY DATE: Entered STN: 6 Dec 1988
Last Updated on STN: 6 Dec 1988

AB The content of blood E1 F2 prostaglandines, cyclic nucleotides, immunoglobulin E was studied in 106 patients with itching dermatosis. Radioimmunologic findings have revealed the principal role of PGE, PGF2, cyclic AMP GMP, IgE in the pathogenesis of atopic dermatitis, prurigo ch. urticaria, lichen ruben planus, and shown the necessity of correcting their levels in the pathogenetical treatment of dermatological diseases.

L8 ANSWER 80 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 28

ACCESSION NUMBER: 1989:100225 BIOSIS
DOCUMENT NUMBER: PREV198987054361; BA87:54361
TITLE: BIOCHEMICAL BACKGROUND OF ACONITINE-INDUCED VENTRICULAR TACHYCARDIA EVALUATION AND ANTIARRHYTHMIC EFFECT OF CLASS 1 B DRUGS BY MEANS OF WORKING HEART PREPARATION.
AUTHOR(S): TOMARU A [Reprint author]; YAMAZAKI T; MIHO O; ISHIHARA H; SUE H; ARAI T; INOUE H; HAMADA M; YOSHIKAWA M; NISHIYAMA N; OKANO H
CORPORATE SOURCE: 2ND DIV, DEP INTERN MED, DAISAN HOSP, JIKEI UNIV SCH MED, 4-11-1, IZUMI-HONCHO, KOMAE-SHI, TOKYO 201, JPN
SOURCE: Jikeikai Medical Journal, (1988) Vol. 35, No. 3, pp. 379-390.
CODEN: JMEJAS. ISSN: 0021-6968.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 6 Feb 1989
Last Updated on STN: 6 Feb 1989

AB To evaluate the mechanism of Aconitine-induced ventricular tachycardia, 0.05 ml of 10-4 Mole Aconitine was injected topically into left ventricular free wall of rat heart which was applied on working heart preparation. Also evaluation of antiarrhythmic effect of class 1 b drugs,

by dissolving in the perfusion fluid ie. Lidocaine (10 microgram/ml) and Mexiletine (3 microgram/ml) was performed and the following conclusions were obtained. 1) By topical injection of Aconitine, ventricular tachycardia was introducted in 100% of the cases. Lidocaine curtailed elicitation of ventricular tachycardia to 50% of cases and 67% of these returned to sinus rhythm during observation period, while on the other hand Mexiletine showed 40% of cases with ventricular tachycardia and 75% of these returned to sinus rhythm. 2) Aconitine injected group showed decreased cyclic AMP, cyclic GMP, and ATP and elevation of catecholamine and lactate in heart and elevation of cyclic AMP, cyclic GMP, and noradrenaline and lactate in coronary sinus flow. Lidocaine and Mexiletine modified these alterations, and there were reduction of adrenaline and lactate in myocardium and reduction of cyclic GMP and increment of lactate in coronary sinus flow. Mexiletine, however, elicited intramyocardial elevation of cycic GMP, cyclic AMP and ATP. Therefore these drugs might have some differences in action. 3) As to whether there was any arrythmogenic effect of cyclic GMP or not, our data indicated the possibility or arrhythmogenic effect of cyclic GMP.

L8 ANSWER 81 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1988:482339 BIOSIS
DOCUMENT NUMBER: PREV198886113649; BA86:113649
TITLE: ENHANCED EXPRESSION OF RAS GENE PRODUCTS IN PSORIATIC EPIDERMIS.
AUTHOR(S): KOBAYASHI H [Reprint author]; YASUDA H; OHKAWARA A; DOSAKA H; ODA A; OGISO Y; KUZUMAKI N
CORPORATE SOURCE: DEP DERMATOL, HOKKAIDO UNIV SCH MED, KITA-15, NISHI-7, KIA-KU, SAPPORO 060, JAPAN
SOURCE: Archives of Dermatological Research, (1988) Vol. 280, No. 5, pp. 259-263.
CODEN: ADREDL. ISSN: 0340-3696.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 1 Nov 1988
Last Updated on STN: 1 Nov 1988

AB The ras oncogene product ras p21 is structurally homologous to guanine nucleotide-binding proteins and lays an important role in transducing signals elicited by membrane receptors into intracellular metabolism. We examined psoriatic tissues for expression of ras p21 and compared them with normal skin, using the indirect immunofluorescence technique with the anti-ras p21 monoclonal antibody (MoAb), rp-35. In normal epidermis of five healthy individuals and uninvolved epidermis of three psoriatic patients, only the basal layer was positively stained by rp-35. The spinous layer was negative or faintly positive. In contrast, all psoriatic epidermis obtained from 13 psoriatic patients had strong reactivity with rp-35 throughout the epidermis. There were no differences in the staining pattern of hair follicles, sebaceous glands, eccrine glands, and eccrine ducts, which positively reacted with rp-35, between psoriatic and normal skin. The functions of ras p21 have not been clearly identified in mammalian cells; however recent reports reveal that cyclic AMP production is inhibited by the transfection of activated ras gene into normal cells. Enhanced expression of ras p21 in psoriatic epidermis may be indicative of some mechanism of defective β-adrenergic responsiveness, which is considered to be one of the important pathophysiological phenomena causing the hyperproliferative condition in psoriasis.

L8 ANSWER 82 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 29

ACCESSION NUMBER: 1988:107978 CAPLUS
DOCUMENT NUMBER: 108:107978

ORIGINAL REFERENCE NO.: 108:17603a,17606a
TITLE: Skeletal muscle glutamine production in thermally injured rats
AUTHOR(S): Ardawi, M. Salleh M.
CORPORATE SOURCE: Fac. Med. Allied Sci., King Abdulaziz Univ., Jeddah, Saudi Arabia
SOURCE: Clinical Science (1988), 74(2), 165-72
CODEN: CSCIAE; ISSN: 0143-5221
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effect of thermal injury (33-35% of body surface area) on the regulation of glutamine metabolism was studied in skeletal muscles of rats 7 days after injury. Injury increased the rates of glutamine production in muscle, skin and adipose tissue prepns., with muscle production accounting for >90% of total glutamine produced by the hindlimb. Injury produced decreases in the concns. of skeletal muscle glutamine, glutamate, alanine, pyruvate, 2-oxoglutarate and ATP. The concns. of ammonia and inosine 5'-phosphate were increased. The maximal activity of glutamine synthetase was increased in muscles of injured rats, whereas that of glutaminase was unchanged. Hindlimb blood flow decreased by .apprx.15% in injured rats, which was accompanied by an enhanced net release of glutamine and alanine. Thus, there is an enhanced rate of release of both glutamine and alanine from skeletal muscle of thermally injured rats. This may be due to changes in efflux and/or increased intracellular formation of glutamine and alanine.

OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)

L8 ANSWER 83 OF 221 CAPLUS
ACCESSION NUMBER: 1988:202276 CAPLUS
DOCUMENT NUMBER: 108:202276
ORIGINAL REFERENCE NO.: 108:33177a,33180a
TITLE: Reversible inhibition of DNA and protein synthesis by cumene hydroperoxide and 4-hydroxy-nonenal
AUTHOR(S): Poot, Martin; Verkerk, Anton; Koster, Johan F.; Esterbauer, Hermann; Jongkind, Johan F.
CORPORATE SOURCE: Dep. Hum. Genet., Wuerzburg, D-8700, Fed. Rep. Ger.
SOURCE: Mechanisms of Ageing and Development (1988), 43(1), 1-9
CODEN: MAGDA3; ISSN: 0047-6374
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To test the possible role of lipid peroxidn. in the process of in vitro aging, human diploid skin fibroblasts were cultured with the lipophilic hydroperoxide cumene hydroperoxide (Chp) or the breakdown product of lipid peroxidn. 4-hydroxy-2,3-trans-nonenal (HNE). Both compds. inhibited cellular DNA and protein synthesis in a dose-dependent way. Cells exposed to Chp or to HNE during growth inhibition recovered DNA and protein synthesis within 24 h on removal of Chp or HNE from the culture medium. Continuously proliferating cells showed only a partial recovery of DNA and protein synthesis. Preculturing cells with the lipophilic free radical scavenger vitamin E did not abolish the effect of Chp upon DNA synthesis. Cellular levels of GSH rose slightly during 1 wk of culture with HNE, but remained unaltered with Chp. Neither ATP levels nor cellular energy charges were affected during culture with Chp or HNE. So, DNA synthesis is not impaired due to a shortage of nucleotides nor does GSH protect DNA synthesis against the effects of Chp or HNE. Apparently O free radical-induced lipid peroxidn. is not the cause of the irreversible loss of proliferation occurring during in vitro aging.

OS.CITING REF COUNT: 33 THERE ARE 33 CAPLUS RECORDS THAT CITE THIS RECORD (33 CITINGS)

L8 ANSWER 84 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1988:129615 CAPLUS
DOCUMENT NUMBER: 108:129615
ORIGINAL REFERENCE NO.: 108:21233a,21236a
TITLE: 5'-Nucleotidase in skin fibroblasts from patients with Duchenne muscular dystrophy
AUTHOR(S): Sinclair, Christine E.; Ecob-Prince, Marion S.; Pennington, Ronald J. T.
CORPORATE SOURCE: Dep. Neurochem., Newcastle Gen. Hosp., Newcastle upon Tyne, NE4 6BE, UK
SOURCE: Biochemical Medicine and Metabolic Biology (1988), 39(1), 1-4
CODEN: BMMBES; ISSN: 0885-4505
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The 5'-nucleotidase of plasma membranes of cultured skin fibroblasts from patients with Duchenne muscular dystrophy had a reduced affinity for its substrate, 5'-AMP. The Arrhenius plot of the temperature dependence of this enzyme activity was normal. There was no difference between patients and controls in the specific 5'-nucleotidase activity in the whole cell homogenates.

L8 ANSWER 85 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 30
ACCESSION NUMBER: 1988:181963 CAPLUS
DOCUMENT NUMBER: 108:181963
ORIGINAL REFERENCE NO.: 108:29781a,29784a
TITLE: Inhibition of phorbol ester-mediated phenotypic changes in cultured cells by hypoxanthine
AUTHOR(S): Ochieng, Josiah; Patrick, Dawn E.; Utz, Eric D.; Trewyn, Ronald W.
CORPORATE SOURCE: Compr. Cancer Cent., Ohio State Univ., Columbus, OH, 43210-1239, USA
SOURCE: Carcinogenesis (1987), 8(11), 1629-33
CODEN: CRNGDP; ISSN: 0143-3334
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Hypoxanthine induces the differentiation of certain transformed cells in vitro, so analyses were undertaken to determine whether this purine metabolite might influence the expression of transformed phenotypes induced in normal cells by chemical agents. Chinese hamster embryo cells and human skin fibroblasts in culture were treated with the promoting agent phorbol 12,13-didecanoate (PDD) with or without prior treatment with 3-methylcholanthrene (MCA), and various phenotypic effects were monitored. Hypoxanthine inhibited significantly the formation of type III foci and the increase in saturation d. observed for Chinese hamster cells treated with MCA
+ phorbol ester. Inosine and the hypoxanthine analog allopurinol could also mediate the effect on saturation d., whereas xanthosine could not. An increase in the saturation d. of human skin fibroblasts, which can be induced by the phorbol ester alone, was also inhibited by hypoxanthine. There was no significant effect on the growth rate or the intracellular nucleotide pools with hypoxanthine-treated cells. Apparently, a normal purine metabolite, hypoxanthine, can modulate the expression of transformed phenotypes induced in vitro by the known tumor promoter PDD. These observations could help in elucidating the cellular basis for promotion of carcinogenesis.

L8 ANSWER 86 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1987:359323 BIOSIS
DOCUMENT NUMBER: PREV198784056726; BA84:56726
TITLE: MICRO-ELECTRODE STUDIES ON THE EFFECTS OF EXOGENOUS CYCLE

AMP ON ACTIVE SODIUM TRANSPORT IN FROG SKIN.
AUTHOR(S): ELS W J [Reprint author]; MAHLANGU A F D
CORPORATE SOURCE: DEP PHYSIOL, UNIV OF THE NORTH, PIETERSBURG, 0700 S AFR
SOURCE: Journal of Physiology (Cambridge), (1987) Vol. 388, pp. 547-564.
CODEN: JPHYA7. ISSN: 0022-3751.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 22 Aug 1987
Last Updated on STN: 22 Aug 1987

AB The electrical parameters of the sodium-transporting cells in frog skin of Rana angolensis were determined under control conditions by using the micro-electrode technique. The data were analysed in terms of an electrical model (Helman, 1979). The control intracellular voltages averaged -84.7 mV while the electromotive force of the inner barrier, E'1, averaged 103.9 mV. The major portion (82%) of the transcellular resistance was situated at the outer, apical, barrier. Exogenous cyclic AMP stimulated active sodium transport and the short-circuit current (Isc) increased by an average 88%. The change in Isc was mediated primarily by decreasing the resistance of the apical barrier (Ro) with little effect on the electromotive force or resistance (Ri) of the inner membranes. Isoprenaline increased the Isc by an average of 165%. The major effect of isoprenaline was to decrease the apical resistance by an average 77%. Forskolin (2.5 μM) stimulated the Isc by an average of 138%. Amiloride would not completely reduce the Isc, but with the low concentrdation of 0.2 μM-forskolin, the Isc was typically inhibited to values close to zero. The major effect of forskolin was also to reduce the resistance of the apical barrier, although it concurrently also caused the E'1 to decrease by about 13%. Theophylline increased the Isc by reducing the resistance of the apical barrier by an average 61%, with little or no effect on the other parameters. Theophylline augmented the effect of cyclic AMP. Our results are consistent with the theory that cyclic AMP is a second messenger in hormonal control of active sodium transport in frog skin.

L8 ANSWER 87 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1988:71722 BIOSIS
DOCUMENT NUMBER: PREV198885038021; BA85:38021
TITLE: ADENYLATE CYCLASE-CYCLIC AMP SYSTEM IN PURE EPIDERMIS ISOLATED BY USE OF DISPASE.
AUTHOR(S): WATANABE M [Reprint author]; IIZUKA H
CORPORATE SOURCE: DEP DERMATOL, ASAHIKAWA MED COLL, 3-11 NISHIKAGURA, ASAHIKAWA 078, JPN
SOURCE: Journal of Dermatology (Tokyo), (1987) Vol. 14, No. 4, pp. 336-342.
CODEN: JDMYAG. ISSN: 0385-2407.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 27 Jan 1988
Last Updated on STN: 27 Jan 1988

AB Epidermal adenylate cyclase systems following dispase treatment were investigated. Dispase is a bacterial neutral protease obtained from Bacillus polymyxa. Following the treatment with dispase, the epidermal sheet is easily peeled off the dermis. Dispase-treated pure epidermal sheets were shown to contain three major (beta-adrenergic-, adenosine-, and histamine-) receptor adenylate cyclase systems. Without phosphodiesterase inhibitors, the intracellular cyclic AMP (cAMP) level reached the maximal level at 3 min. This effect was markedly enhanced by the addition of cAMP phosphodiesterase inhibitor. Among these epidermal

adenylate cyclase systems, the most marked cAMP accumulation was observed by histamine, followed by adenosine, and then by epinephrine. The separation of epidermis and dermis following dispase treatment revealed that epidermis contained most of the beta-adrenergic response (87%), whereas the dermis retained a significant proportion of adenosine (26%) and histamine(40%) responses when 0.3 mm thickness skin was studied. Specific antagonists of epinephrine, adenosine, and histamine inhibited the effects of these agents completely. The simultaneous addition of two stimulators into the incubation medium resulted in an additive effect. Beta-augmentations by hydrocortisone, colchicine, and retinoid all remained in the dispase-treated pure epidermal sheets, but beta-augmentations by these drugs were spoiled by trypsin treatment. These results indicate that dispase-treated pure epidermis contains three major (beta-adrenergic-, adenosine-, and histamine-) specific and independent receptor adenylate cyclase systems. Dispase is a very useful tool for investigating the metabolism and regulatory system of keratinocytes without any significant damage to epidermal membrane receptor systems.

L8 ANSWER 88 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1987:442624 BIOSIS
DOCUMENT NUMBER: PREV198784098462; BA84:98462
TITLE: DETERMINATION OF CYCLIC AMP AND CYCLIC GMP IN PSORIATIC EPIDERMIS AND DERMIS.
AUTHOR(S): YANG X-Q [Reprint author]; WANG G-C
CORPORATE SOURCE: PLA AIR FORCE GEN HOSP, BEIJING, CHINA
SOURCE: Chinese Medical Journal (English Edition), (1987) Vol. 100, No. 3, pp. 216-218. CODEN: CMJODS. ISSN: 0366-6999.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 24 Oct 1987 Last Updated on STN: 24 Oct 1987
AB This article reports the cyclic AMP and cyclic GMP content of psoriatic epidermis and dermis and compares them with those of normal human skin. Cyclic AMP content of involved and uninvolved epidermis of psoriatic patients were found to be significantly decreased by 41% and 46% respectively (DNA data basis) as compared with normal human skin . But cyclic AMP content of psoriatic dermis was increased by 103% (wet weight), as compared to uninvolved and normal human dermis. Cyclic GMP content of psoriatic epidermis was significantly increased by 124% and 150% (wet weight) as compared with uninvolved and normal human epidermis. These changes may play an important role in causing psoriatic lesions.

L8 ANSWER 89 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 31
ACCESSION NUMBER: 1987:456850 CAPLUS
DOCUMENT NUMBER: 107:56850
ORIGINAL REFERENCE NO.: 107:9431a,9434a
TITLE: Effect of single and repeated scalding on adenine nucleotides concentration in rat liver
AUTHOR(S): Savic, Jovan D.; Mrsulja, B. B.; Duricic, B. M.; Pantelic, D. B.
CORPORATE SOURCE: Inst. Exp. Med., Mil. Med. Acad., Belgrade, 11000, Yugoslavia
SOURCE: Circulatory Shock (1987), 21(2), 141-8 CODEN: CRSHAG; ISSN: 0092-6213
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Changes in ATP, ADP, AMP, and total adenine nucleotide (TAN) concns. and in the adenylate energy charge (EC) were investigated in the livers of

rats subjected to single and repeated scalding. Single scaldings were of 2 grades of severity: 20% (nonlethal) and 40% (lethal within 24 h) of the total body surface area. A repeated scald (addnl. 20%) was inflicted on the intact skin of the opposite side of the body either 3 h or 3 days after a nonlethal scald. Apparently, the energy state of the liver is related to the severity of a single scald, the EC at the moment of repeating the scald is important for survival, and the changes in ATP, EC, and TAN following a repeated scald are qual. or quant. different from those after a single scald.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 90 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 32

ACCESSION NUMBER: 1988:307225 BIOSIS
DOCUMENT NUMBER: PREV198886024263; BA86:24263
TITLE: LACK OF EFFICACY OF AMP AGAINST HSV-1 OCULAR SHEDDING IN RABBITS.
AUTHOR(S): HILL J M [Reprint author]; HARUTA Y; YAMAMOTO Y; JONES M D; WINGATE H L; JEMISON M T
CORPORATE SOURCE: LSU EYE CENTER, 2020 GRAVIER STREET, SUITE B, NEW ORLEANS, LA 70112, USA
SOURCE: Journal of Ocular Pharmacology, (1987) Vol. 3, No. 1, pp. 31-38.
CODEN: JOPHER. ISSN: 8756-3320.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 3 Jul 1988
Last Updated on STN: 3 Jul 1988

AB Adenosine-5'-monophosphate (AMP) was evaluated for efficacy in the prevention of spontaneous and induced herpes simplex virus type 1 (HSV-1) ocular shedding in latently infected rabbits with strain McKrae. Intraperitoneal injections (IP) of AMP (100 mg/kg) or NaCl (10 mg/kg) were given on postinoculation (PI) days 16-39. Spontaneous viral shedding was monitored by ocular tear film swabs on PI days 20-39. In the induced rabbits, one group received AMP (IP) and a second group received NaCl (IP) on PI days 66-77. In a third group, AMP (100 mg/kg) was given twice a day IP on PI days 66-77, and AMP was applied by iontophoresis to these eyes on PI days 68-74. In these three groups, ocular viral shedding was induced by ocular iontophoresis of 6-hydroxydopamine on PI day 70 followed by topical application of epinephrine for 5 days (PI days 70-74). HSV-1 ocular shedding was monitored on PI days 66-78. There were no significant differences in spontaneous or induced shedding patterns between the AMP (systemic or systemic plus ocular iontophoresis) and the NaCl groups. These results suggest that this dose of systemically administered AMP plus iontophoresis of AMP does not reduce ocular HSV-1 shedding in rabbits.

L8 ANSWER 91 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1987:123112 BIOSIS
DOCUMENT NUMBER: PREV198783062173; BA83:62173
TITLE: A COMPARATIVE STUDY BETWEEN BLOOD AND CRYSTALLOID CARDIOPLEGIA DURING PROLONGED AORTIC OCCLUSION IN DOGS.
AUTHOR(S): SHIKI K [Reprint author]
CORPORATE SOURCE: DIV CARDIOVASCULAR SURG, RES INST ANGIOCARDIOL, FAC MED, KYUSHU UNIV, FUKUOKA, JPN
SOURCE: Journal of the Japanese Association for Thoracic Surgery, (1986) Vol. 34, No. 11, pp. 1954-1965.
CODEN: NKZAAY. ISSN: 0369-4739.
DOCUMENT TYPE: Article

FILE SEGMENT: BA
LANGUAGE: JAPANESE
ENTRY DATE: Entered STN: 7 Mar 1987
Last Updated on STN: 7 Mar 1987

AB This study was undertaken to assess the effect of temperature of blood cardioplegia and to compare the protective effect of blood cardioplegia (BC) and oxygenated or non-oxygenated crystalloid cardioplegia (CC) during 3 hours of hypothermic arrest. Twenty four dogs for metabolic study and twenty four dogs for functional study were equally divided into four experimental groups: Group I 20° C BC, Group II 5-10° C BC, Group III 4° C oxygenated CC, Group IV 4° C non-oxygenated CC. Each cardioplegic solution was infused every 30 minutes during arrest, and myocardial temperature was maintained at 15-20° C in Group I and at 5-10° C in Group II, III and IV using topical hypothermia. In dogs for metabolic study, ventricular biopsies were serially obtained for measurement of myocardial creatine phosphate (CP), adenine nucleotides (ATP, ADP, and AMP) and lactate. Total high energy phosphate content (HEP) was calculated as CP + (2 + ATP) + ADP. Change in left ventricular (LV) function was expressed as percentage change in left ventricular stroke work at the same left atrial pressure (5 mmHg). Oxygen extraction from cardioplegic solution was 3.32 ± 0.32 vol% in Group I, 2.18 ± 0.16 vol% in Group II, 1.95 ± 0.14 vol% in Group III and 0.65 ± 0.01 vol% in Group IV. During arrest the utilization of oxygen was well reflected in the sequential changes of HEP and CP. The HEP at the end of arrest was 18.1 ± 1.5 in Group I, 15.1 ± 1.5 in Group II, 15.4 ± 1.0 in Group III and 12.4 ± 0.2 in Group IV (μmole/gr wet weight, $p < 0.01$ I vs IV, $p < 0.05$ III vs IV). Group II hearts showed higher coronary vascular resistance during infusion of cardioplegic solution and significant accumulation of myocardial lactate during arrest compared with Group I. ATP at 30 minutes after reperfusion was 5.27 ± 0.30 in Group I, 4.68 ± 0.23 in Group II, 5.10 ± 0.27 in Group III and 4.58 ± 0.16 in Group IV (μmole/gr wet weight NS). LV function percentage recovery was 89.8 ± 6.2% in Group I, 80.7 ± 5.3% in Group II, 93.7 ± 7.7% in Group III and 66.4 ± 3.5% in Group IV ($p < 0.01$ III vs IV). It was concluded that 1) oxygen was utilized effectively even in hypothermia less than 10° C, 2) oxygen had a significant additive effect in CC, 3) 20° C BC was more effective than 5-10° C BC, 4) 5-10° C BC resulted in higher coronary vascular resistance and significant lactate accumulation during arrest, and 5) 4° C oxygenated CC was as effective as 20° C BC.

L8 ANSWER 92 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1987:47617 CAPLUS
DOCUMENT NUMBER: 106:47617
ORIGINAL REFERENCE NO.: 106:7853a,7856a
TITLE: Production and degradation of AMP in cultured rat skeletal and heart muscle: a comparative study
AUTHOR(S): Zoref-Shani, E.; Shainberg, A.; Kessler-Icekson, G.; Sperling, O.
CORPORATE SOURCE: Sch. Med., Tel Aviv Univ., Israel
SOURCE: Advances in Experimental Medicine and Biology (1986), 195B(Purine Pyrimidine Metab. Man 5, Pt. B), 485-91
CODEN: AEMBAP; ISSN: 0065-2598
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Cultures of rat myotubes and cardiomyocytes and human skin fibroblasts formed 14C-labeled purine nucleotides de novo from [14C]formate with myotubes exhibiting an .apprx.4-fold higher rate than the others. Salvage formation of nucleotides from adenosine, adenine, and hypoxanthine was also demonstrated. The activities of AMP-metabolizing

enzymes were also measured. Both AMP and IMP nucleotidases were lower in both muscle cells than in fibroblasts; AMP deaminase was highest in myotubes. Cardiomyocytes and myotubes both formed 14C-labeled nucleotides, inosine, hypoxanthine, and adenosine from [14C]adenine. Inhibition of adenosine deaminase (ADA) by 5 μM 2'-deoxycoformycin increased labeling of adenosine (especially in cardiomyocytes) and decreased labeling of inosine and hypoxanthine as well as total nucleotides. In cardiomyocytes inhibition of adenylate kinase by addition of 50 μM 5'-amino-5'-deoxyadenosine caused increased inosine and hypoxanthine labeling and a decrease in nucleotide labeling relative to ADA-inhibited cells. These effects of adenylate kinase inhibition were minor in myotubes. Apparently, the most effective mechanism for adenosine accumulation is ADA inhibition, which may have implications for adenosine accumulation in severe hypoxia.

L8 ANSWER 93 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1986:179857 CAPLUS
DOCUMENT NUMBER: 104:179857
ORIGINAL REFERENCE NO.: 104:28313a,28316a
TITLE: Specificity of 2'-deoxycoformycin inhibition of adenosine metabolism in intact human skin fibroblasts
AUTHOR(S): Holland, Mary Jean C.
CORPORATE SOURCE: Med. Cent., New York Univ., New York, NY, 10016, USA
SOURCE: Research Communications in Chemical Pathology and Pharmacology (1986), 51(3), 311-24
CODEN: RCOCB8; ISSN: 0034-5164
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Studies with purified enzymes have shown that 2'-deoxycoformycin (dCF) [53910-25-1] is a potent and selective inhibitor of adenosine deaminase (ADA) [9026-93-1]. Specificity of dCF's effects on adenosine [58-61-7] metabolism in intact human skin fibroblasts was investigated by examining the isotopic flux from exogenous [14C]adenosine to metabolic products in hypoxanthine phosphoribosyltransferase-deficient (HPRT-) cells which cannot recycle hypoxanthine. Apparent ADA activity (as estimated by isotopic flux to inosine [58-63-9] and hypoxanthine [68-94-0]) was profoundly inhibited by dCF (with at least 50% inhibition at 10-8M and 95% inhibition at 10-5M dCF). The degree of inhibition was similar at various exogenous adenosine concns. ranging 1-400 μM. Some inhibition of isotopic flux to adenine nucleotides (an ADA-independent process in HPRT- cells) could be demonstrated, but only in media containing high concns. of adenosine. Even at 400 μM adenosine, the highest concentration employed, isotopic flux to adenine nucleotides was unaffected by concns. of dCF below 10-6M, and only 30% inhibition was achieved with 10-5M dCF. Inhibition of adenosine phosphorylation to AMP [61-19-8] appears to be the most likely explanation for dCF inhibition of isotopic flux from [14C]adenosine to adenine nucleotides, probably due to substrate inhibition of adenosine kinase by high levels of intracellular adenosine produced when ADA is inhibited by dCF. No evidence for dCF inhibition of either adenosine transport or phosphorylations within the adenine nucleotide pool (from AMP to ADP [58-64-0] or from ADP to ATP [56-65-5]) was found. Thus, at physiol. levels of exogenous adenosine (0.03-2.6 μM), dCF appears to be a potent and highly specific inhibitor of ADA in human skin fibroblasts.

L8 ANSWER 94 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1986:211269 BIOSIS
DOCUMENT NUMBER: PREV198681102569; BA81:102569
TITLE: THE ISOLATION OF HUMAN SEBACEOUS GLANDS AND APOCRINE SWEAT GLANDS BY SHEARING.
AUTHOR(S): KEALEY T [Reprint author]; LEE C M; THODY A J; COAKER T

CORPORATE SOURCE: DEP CLIN BIOCHEM, R VICT INFIRM, NEWCASTLE UPON TYNE NE1 4LP, UK
SOURCE: British Journal of Dermatology, (1986) Vol. 114, No. 2, pp. 181-188.
CODEN: BJDEAZ. ISSN: 0007-0963.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 28 May 1986
Last Updated on STN: 28 May 1986

AB A new method of isolating human sebaceous and apocrine sweat glands by the repeated dissection of skin biopsies with scissors is described. The success of the technique is attributed to a line of weakness between the investing capsule and the surrounding connective tissue which parts under shear forces. The glands are judged to be viable by: (i) light and electron microscopy; (ii) ATP, ADP and AMP contents of 148.8 ± 30.3, 30.6 ± 4.7 and 14.9 ± 4.7 pmol (mean ± s.e.m.) for sebaceous glands and 310.2 ± 34.1, 90.35 ± 16.3 and 40.1 ± 11.8 pmol (mean ± s.e.m.) for apocrine sweat glands, which gave energy charges of 0.84 and 0.81, respectively; and (iii) a rate of sebaceous gland lipogenesis of 39.7 ± 3.7 pmol glucose incorporated into lipid/gland/h (mean ± s.e.m.).

L8 ANSWER 95 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1986:86373 CAPLUS
DOCUMENT NUMBER: 104:86373
ORIGINAL REFERENCE NO.: 104:13685a,13688a
TITLE: Effect of ischemia and reperfusion of pig skin flaps on epidermal glycogen metabolism
AUTHOR(S): Harmon, Charles S.; Masser, Michael R.; Phizackerley, Patrick J. R.
CORPORATE SOURCE: Nuffield Dep. Clin. Biochem., Univ. Oxford, Oxford, UK
SOURCE: Journal of Investigative Dermatology (1986), 86(1), 69-73
CODEN: JIDEAE; ISSN: 0022-202X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Pedicled skin flaps in the pig were used to investigate the effects of 3-h ischemia and reperfusion on the epidermal metabolism of glycogen and glucose. Epidermal glycogen content fell steadily at a rate of about 1.2 μmol of glucose-equivalent per g wet weight per h, whereas the rate of glucose consumption declined from 1.8 μmol per g wet weight during the first hour to about 0.25 μmol per g wet weight in the third hour. During ischemia, the proportion of glycogen synthase in the I form increased progressively from an initial value of about 8% to about 70%, but the proportion of phosphorylase in the a form decreased only in the third hour of ischemia. The concentration of ATP decreased and ADP and AMP increased but the total pool of epidermal adenine nucleotides was not depleted. On reperfusion, these changes were reversed and normal epidermal concns. of glucose and adenine nucleotides were restored within 30 min and remained stable thereafter. The resynthesis of glycogen proceeded at a steady rate of about 1 μmol per h per g wet weight and the phosphorylation state of both glycogen synthase and phosphorylase approached normal values after 3 h. Thus, epidermal glycogenolysis in ischemia is, at least in part, a consequence of activation of phosphorylase b by AMP, and glycogen resynthesis on reperfusion is promoted by the ischemia activation of glycogen synthase.

L8 ANSWER 96 OF 221 EMBASE DUPLICATE 33
ACCESSION NUMBER: 1985078804 EMBASE
TITLE: Herpes zoster. The treatment and prevention of neuralgia

with adenosine monophosphate.
AUTHOR: Sklar, S.H.; Blue, W.T.; Alexander, E.J.; Bodian, C.A.
CORPORATE SOURCE: Shingles Clinic, Englewood Hospital, Englewood, NJ 07631, United States.
SOURCE: Journal of the American Medical Association, (1985) Vol. 253, No. 10, pp. 1427-1430.
ISSN: 0098-7484 CODEN: JAMAAP
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 006 Internal Medicine
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
037 Drug Literature Index
008 Neurology and Neurosurgery
030 Clinical and Experimental Pharmacology
020 Gerontology and Geriatrics
013 Dermatology and Venereology
024 Anesthesiology
LANGUAGE: English
ENTRY DATE: Entered STN: 10 Dec 1991
Last Updated on STN: 10 Dec 1991

AB Thirty-two adults were enrolled in a randomized, placebo-controlled double-blind trial of intramuscular injections of gel-sustained adenosine monophosphate (AMP) gien three times a week for up to four weeks for acute herpes zoster. Adenosine monophosphate moderately reduced the pain soon after the start of treatment, decreased desquamation time, and promoted faster healing of the skin than placebo treatment. Adenosine monophosphate treatment reduced virus shedding and cleared the virus faster than in placebo-treated subjects. At the end of the initial four-week treatment period, 88% of AMP-treated patients were pain free, as opposed to only 43% in the placebo group. After four weeks, all patients who had not recovered from pain started receiving AMP treatment without breaking the code. All these patients recovered from pain within three weeks after iniiation of treatment. No recurrence of pain or lesions was experienced from three to 18 months after the end of treatment. Adenosine monophosphate, a natural cellular metabolite, showed no side effects or toxicity during and after the treatment.

L8 ANSWER 97 OF 221 TOXCENTER COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1985:56 TOXCENTER
COPYRIGHT: Copyright (c) 2010 The Thomson Corporation
DOCUMENT NUMBER: 22-06753
TITLE: Herpes zoster: treatment and prevention of neuralgia with adenosine monophosphate
AUTHOR(S): Sklar, S. H.; Blue, W. T.; Alexander, E. J.; Bodian, C. A.
CORPORATE SOURCE: Shingles Clin., Englewood Hosp., 350 Engle St., Englewood, NJ 07631
SOURCE: Journal of the American Medical Association (USA), (Mar 8 1985) Vol. 253, pp. 1427-1430. 12 Refs.
CODEN: JAMAAP. ISSN: 0098-7484.
DOCUMENT TYPE: Journal
FILE SEGMENT: IPA
OTHER SOURCE: IPA 85:175
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Nov 2001
Last Updated on STN: 16 Nov 2001

AB The therapy of herpes zoster and prevention of associated neuralgia in 32 patients, aged 20 to 89 yr, who received adenosine monophosphate (adenosine phosphate; I), 100 mg 3 times a wk by intramuscular injection, was studied. Therapy with I moderately reduced the pain soon after the start of treatment, decreased desquamation time, and promoted faster healing of the skin than placebo. Treatment reduced virus

shedding and cleared the virus faster than did placebo. At the end of the initial 4 wk treatment period, 88% of treated patients were pain free, as opposed to only 43% in the placebo group. After 4 wk, all patients who had not recovered from pain started receiving I treatment. All these patients recovered from pain within 3 wk after initiation of treatment. No recurrence of pain or lesions was experienced from 3 to 18 months after the end of treatment. No side effects or toxicity were noted during and after the treatment.
Peggy L. Ruppel

L8 ANSWER 98 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1985:576465 CAPLUS
DOCUMENT NUMBER: 103:176465
ORIGINAL REFERENCE NO.: 103:28355a,28358a
TITLE: A model for the study of coronary spasm induced changes in cardiac metabolism
AUTHOR(S): Burger, Wolfram; Chemnitius, J. Michael; Metz, Marianne Z.; Bing, Richard J.
CORPORATE SOURCE: Huntington Med. Res. Inst., Huntington Mem. Hosp., Pasadena, CA, 91105, USA
SOURCE: Journal of Molecular and Cellular Cardiology (1985), 17(9), 917-30
CODEN: JMCDAY; ISSN: 0022-2828
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A model is described which permits the study of localized and generalized arterial spasm in the intact working perfused rabbit heart with a perfluorochem. (FC-43) as perfusate. Coronary arteries were visualized by intraatrial injection of Patent Dye with gated photog. Localized spasm resulted from topical spray of histamine (40 μmol) on the epicardial surface overlying an obtuse marginal artery. Before and following topical administration of histamine, regional coronary flow was determined using radioisotope-labeled microspheres. Generalized arterial spasm was initiated by intraatrial injection of histamine (10 μmol). After topical administration, obtuse marginal artery diameter decreased by 57%; large vessel resistance rose 32-fold; 20% rise of total coronary resistance resulted in a slight reduction of total coronary flow (16%). Heart rate, cardiac output, dP/dtmax and myocardial O2 consumption did not change. However, regional coronary flow in the myocardium supplied by the affected artery diminished 21% resulting in ischemic changes in redox pairs. After intraatrial injection of histamine, changes were more pronounced. Obtuse marginal artery diameter declined by 88%, resulting in 3300-fold rise of large vessel resistance. Total coronary resistance increased 150% and coronary flow and cardiac output diminished (56% and 24%). Both heart rate and dP/dtmax increased (16% and 17%). Generalized coronary spasm after intraatrial histamine injection resulted in severe metabolic effects: myocardial O2 consumption (-48%); ATP (-29%); creatine phosphate (-34%); redox ratios, α-glycerophosphate/dihydroxyacetone phosphate and lactate/pyruvate, increased by 449% and 114%, resp. The findings illustrate that localized and generalized coronary spasm can be produced and quantitated in a working heart model.

L8 ANSWER 99 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1985:330676 BIOSIS
DOCUMENT NUMBER: PREV198580000668; BA80:668
TITLE: CHARACTERISTICS OF COLLAGEN-INDUCED FIBRINOGEN BINDING TO HUMAN PLATELETS.
AUTHOR(S): LEGRAND C [Reprint author]; DUBERNARD V; NURDEN A T
CORPORATE SOURCE: UNITE 150, INST NATIONAL DE LA SANTE ET DE LA RECHERCHE MED, HOPITAL LARIBOISIERE, 6 RUE GUY PATIN, 75010 PARIS, FR

SOURCE: Biochimica et Biophysica Acta, (1985) Vol. 812, No. 3, pp. 802-810.
CODEN: BBACAQ. ISSN: 0006-3002.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Polymerized type I calf skin collagen induced a time-dependent specific binding of 125I-fibrinogen to washed human platelets. Binding occurred more rapidly in a shaken rather than in an unstirred system. It was linear in the range 0.05-0.3 μM added fibrinogen and was saturated at higher fibrinogen concentrations (more than 0.8 μM). Scatchard analysis showed a single population of binding sites (16,530 ± 5410/platelet) with a Kd = 0.53 ± 0.23 μM. Collagen-induced 125I-fibrinogen binding to platelets was completely inhibited by ADP antagonists such as creatine phosphate/creatine phosphokinase and AMP and partially inhibited by pretreatment of the platelets with aspirin. With both normal and aspirin-treated platelets a close correlation was observed between the amount of 125I-fibrinogen bound and the extent of dense granule secretion. Apparently, fibrinogen becomes bound to platelet surface receptors during collagen-induced platelet aggregation; secreted ADP evidently is an essential cofactor in this process.

L8 ANSWER 100 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 34
ACCESSION NUMBER: 1985:436660 BIOSIS
DOCUMENT NUMBER: PREV198580106652; BA80:106652
TITLE: THE SPINAL CORD CONTAINS MULTIPLE FACTORS CAUSING PLASMA PROTEIN EXTRAVASATION IN THE SKIN.
AUTHOR(S): GAMSE R [Reprint author]; SARIA A
CORPORATE SOURCE: DEP PHARMACOLOGY, UNIV GRAZ, UNIVERSITAETSPLATZ 4, A-8010 GRAZ, AUSTRIA
SOURCE: European Journal of Pharmacology, (1985) Vol. 113, No. 3, pp. 363-372.
CODEN: EJPHAZ. ISSN: 0014-2999.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Nervous tissue was analyzed for possible mediators of neurogenic inflammation. Acid extracts of spinal cord or spinal roots contained activity causing plasma protein extravasation when injected into the rat abdominal skin. The activity was more than 1000-fold higher than could be attributed to the content of substance P (SP). It was not depleted from spinal cord after destruction of afferent C fibers by capsaicin and was resistant to proteolytic enzymes. The activity was clearly separated from SP or neurokinins by HPLC (high performance liquid chromatography) or gel filtration and was due to compounds of high polarity and low MW. Further HPLC separated at least 6 peaks, 2 of which were found to contain adenosine and AMP, respectively, as active substances. The activity of these compounds and of the peaks was reduced by antihistaminics. A further compound identified was 5-HT. Thus, while several active non-peptidergic compounds were found, no clear evidence for a new mediator of neurogenic inflammation was obtained.

L8 ANSWER 101 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 35
ACCESSION NUMBER: 1985:420752 CAPLUS
DOCUMENT NUMBER: 103:20752
ORIGINAL REFERENCE NO.: 103:3415a,3418a
TITLE: In vivo studies of energy metabolism in experimental cerebral ischemia using topical magnetic resonance. Changes in phosphorus-31 nuclear magnetic resonance spectra compared with electroencephalograms and regional cerebral blood flow

AUTHOR(S): Horikawa, Y.; Naruse, S.; Hirakawa, K.; Tanaka, C.; Nishikawa, H.; Watari, H.
CORPORATE SOURCE: Dep. Neurosurg., Kyoto Prefect. Univ. Med., Kyoto, 602, Japan
SOURCE: Journal of Cerebral Blood Flow and Metabolism (1985), 5(2), 235-40
CODEN: JCBMDN; ISSN: 0271-678X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The energy state of the brain during and after transient cerebral ischemia was examined in rats by in vivo measurement of 31P-NMR spectra using a topical magnetic resonance spectrometer. EEGs and regional CBF (rCBF) were monitored on the same ischemic models. Immediately after the induction of ischemia, the height of the ATP and phosphocreatine peaks in the spectrum began to decrease with a concurrent increase of the inorg. phosphate (Pi) peak. The calculated pH from the chemical shift of Pi decreased during ischemia. The EEG pattern became flat immediately after ischemic induction. The rCBF decreased below the sensitivity level of the measuring instrument. With 30-min ischemia, the 31P-NMR spectrum returned to a normal pattern rapidly after recirculation. However, recovery of the EEG was delayed. The rCBF after recirculation showed postischemic hyperemia followed by hypoperfusion. In cases of 120-min ischemia, none of the spectra showed recovery.

L8 ANSWER 102 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1984:597944 CAPLUS
DOCUMENT NUMBER: 101:197944
ORIGINAL REFERENCE NO.: 101:29907a,29910a
TITLE: Cosmetics containing nucleic acids, polysaccharides, and plant extracts
PATENT ASSIGNEE(S): Kobayashi Kose Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59134706	A	19840802	JP 1983-5944	19830119 <--

PRIORITY APPLN. INFO.: JP 1983-5944 19830119
AB Cosmetics, which improve skin metabolism and maintain moisture, consist of (1) nucleic acids, (2) a moisture-holding component (amino acids, peptides, polysaccharides, etc.), and (3) physiol. active agents (vitamins, enzymes, plant exts. etc.). Thus, a cream comprises petrolatum 1, liquid paraffin 10, wheat germ oil 5, stearic acid 1.5, sorbitan sesquioleate 1.5, perfume 0.1, 1,3-butylene glycol 3, carboxyvinyl polymer 0.01, DNA Na salt 1, Na hyaluronate [9067-32-7] 0.2, Tohki extract 1, preservative 0.1, NaOH 0.005, and H2O to 100% by weight
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 103 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1984:428111 CAPLUS
DOCUMENT NUMBER: 101:28111
ORIGINAL REFERENCE NO.: 101:4373a,4376a
TITLE: Cosmetic preparations promoting the trophism of the skin and of the related hair follicles
INVENTOR(S): Gazzani, Giovanni
PATENT ASSIGNEE(S): CRINOS Industria Farmacobiologica S.p.A., Italy
SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 107885	A1	19840509	EP 1983-201530	19831025 <--
EP 107885	B1	19870729		
R: AT, BE, DE, GB, NL, SE				
AT 28561	T	19870815	AT 1983-201530	19831025 <--
BR 8305952	A	19840605	BR 1983-5952	19831027 <--
CH 655653	A5	19860515	CH 1983-5823	19831027 <--
FR 2535201	A1	19840504	FR 1983-17274	19831028 <--
FR 2535201	B1	19870703		
JP 59130207	A	19840726	JP 1983-201128	19831028 <--
JP 63048244	B	19880928		
CA 1213522	A1	19861104	CA 1983-439958	19831028 <--
IL 70086	A	19861231	IL 1983-70086	19831030 <--
US 5053230	A	19911001	US 1987-133199	19871215 <--

PRIORITY APPLN. INFO.:

IT 1982-23994	A	19821029
IT 1983-22047	A	19830713
EP 1983-201530	A	19831025
US 1983-545674	B1	19831025

AB A cosmetic preparation consists of an efficacious amount of a nutrient medium for the in vivo culture of isolated human epithelial cells and a related amount of borine fetus serum. The preparation is active as a revitalizing agent for the skin, as antiwrinkle agent and promotes hair growth. The activity of the nutrient medium comprising amino acids, vitamins, etc., is further enhanced by adding exts. from connective tissues of animal organs which containly mainly mucopolysaccharides. Thus, a powder nutrient medium was prepared containing various amino acids, vitamins, uracil [66-22-8] and other materials. An antiwrinkle, moisturizing cream was prepared containing the medium 0.4, serum of bovine fetus 2.5, polyethylene glycol stearate 5.0, stearin 6.5, lanolin oil 6, squalene 2, spermacetic 8, preservatives and perfume (small amount) and water to 100 g.

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L8 ANSWER 104 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1984:354441 BIOSIS
DOCUMENT NUMBER: PREV198478090921; BA78:90921
TITLE: THE DEVELOPMENT OF PSEUDOHYPOPARATHYROIDISM INVOLVEMENT OF PROGRESSIVELY INCREASING SERUM PARATHYROID HORMONE CONCENTRATIONS INCREASED 1 25 DI HYDROXY VITAMIN D CONCENTRATIONS AND MIGRATORY SUB CUTANEOUS CALCIFICATIONS.
AUTHOR(S): TSANG R C [Reprint author]; VENKATARAMAN P; HO M; STEICHEN J J; WHITSETT J; GREER F
CORPORATE SOURCE: UNIV CINCINNATI MED CENT, 231 BETHESDA AVE, CINCINNATI, OH 45267-0541, USA
SOURCE: American Journal of Diseases of Children, (1984) Vol. 138, No. 7, pp. 654-658. CODEN: AJDCAI. ISSN: 0002-922X.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB The hormonal changes in the development of pseudohypoparathyroidism (PSH) have not been previously reported. The male sibling of a child with PSH

was studied for 2.5 yr. At 1 yr of age he had generalized s.c. calcifications that subsequently migrated over his body. At 3 yr of age and over a 6-mo. period, serum Ca levels fell; serum P, parathyroid hormone (PTH), and 1,25-dihydroxyvitamin D (1,25-[OH]2D) concentrations increased. There was no calcemic, phosphaturic, or urinary cAMP response to PTH. The concentration of serum PTH was suppressed by infusion of Ca and doubled with edetic acid infusion, indicating that the parathyroids were sensitive to changes in Ca levels. Thus, increasing PTH and increased 1,25-(OH)2D concentrations occur in the development of PSH. Migratory skin calcifications may occur. Increasing the serum PTH level reflects increasing compensatory parathyroid production to overcome a progressive PTH receptor defect and serves, with increased 1,25-(OH)2D concentrations, to prevent severe falls in serum Ca concentrations in the early stage of the disease.

L8 ANSWER 105 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 36

ACCESSION NUMBER: 1985:325172 BIOSIS
DOCUMENT NUMBER: PREV198579105168; BA79:105168
TITLE: BIOCHEMICAL AND ULTRASTRUCTURAL STUDIES OF HUMAN ECCRINE SWEAT GLANDS ISOLATED BY SHEARING AND MAINTAINED FOR 7 DAYS.
AUTHOR(S): LEE C M [Reprint author]; JONES C J; KEALEY T
CORPORATE SOURCE: DEP CLIN BIOCHEM, UNIV NEWCASTLE UPON TYNE, ROYAL VICTORIA INFIRMARY, NEWCASTLE UPON TYNE, NE1 4LP, UK
SOURCE: Journal of Cell Science, (1984) Vol. 72, pp. 259-274.
CODEN: JNCSAI. ISSN: 0021-9533.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB A new method of isolating human eccrine sweat glands by the repeated dissection of skin biopsies with scissors is described. The success of the technique is attributed to a potential line of weakness between the investing capsule and the surrounding connective tissue, which parts under shear forces. The yield is 20-50 glands/biopsy (5 cm + 0.5 cm). The glands are judged to be viable by: light microscopy and EM; ATP, ADP and AMP contents of 81.0 ± 12.7, 13.8 ± 3.3 and 3.8 ± 1.0 pmol/gland, respectively (mean ± SEM [standard error of the mean]), which gave an energy charge of 0.90; the 28-fold rise in cGMP content and the 7-fold rise in cAMP content effected by treatment for 2 min with 10-5 M-acetylcholine and for 10 min with 10-5 M-isoprenaline, respectively; the rate of [3H]leucine uptake into protein; and the concentration of Neutral Red by the collecting duct. Glands were maintained for 7 days on polycarbonate filters floating on RPMI 1640 tissue-culture medium. After this time the ATP, ADP and AMP contents were 63.2 ± 7.3, 8.5 ± 2.2 and 3.5 ± 0.8 pmol/gland, respectively (mean ± SEM), which gave an energy charge of 0.90. During maintenance a dilatation of the intercellular spaces developed in both secretory coil and collecting duct. Following maintenance there was a significant rise in the rate of [3H]leucine uptake into protein. Maintained glands demonstrated a 5-fold greater accumulation of cAMP in response to isoprenaline than did freshly isolated glands, but there was no comparable maintenance hypersensitivity of cGMP to acetylcholine. This pattern of adrenergic, but not cholinergic, maintenance hypersensitivity matches the known lack of denervation hypersensitivity of human eccrine sweat glands to acetylcholine in vivo.

L8 ANSWER 106 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1985:259747 BIOSIS
DOCUMENT NUMBER: PREV198579039743; BA79:39743

TITLE: CELLULAR PH AND THE ANTIDIURETIC HORMONE-INDUCED HYDROOSMOTIC RESPONSE IN DIFFERENT ANTIDIURETIC HORMONE TARGET EPITHELIA.
AUTHOR(S): PARISI M [Reprint author]; WIETZERBIN J
CORPORATE SOURCE: DEPARTEMENT DE BIOLOGIE, CEN DE SACLAY, F-91191 GIF SUR YVETTE, FRANCE
SOURCE: Pfluegers Archiv European Journal of Physiology, (1984) Vol. 402, No. 2, pp. 211-215.
CODEN: PFLABK. ISSN: 0031-6768.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB The hydrosmotic response elecited by oxytocin in the frog skin epithelium (Rana esculenta) was reversibly inhibited by 70% when the medium pH was reduced to 6.2 by CO2 bubbling on the serosal side. The response to 8-bromo cAMP (8 Br-CAMP) was not affected by medium acidification, even after corion removal. In other experiments intracellular pH was measured, employing the dimethyl-oxazolidine-dione distribution technique, in frog urinary bladder and the isolated frog skin epithelium. As observed in the case of oxytocin, 8 Br-CAMP increased intracellular pH in frog urinary bladder. Incubation with oxytocin also augmented the intracellular pH in the isolated frog skin epithelium, but 8 Br-CAMP did not modify cell proton concentration in this tissue. The intracellular alkalinization effect elicited by oxytocin addition and the inhibition in the hydrosmotic response induced by medium acidification were qualitatively similar in both tested target epithelia. A post cAMP step sensitive to changes in intracellular pH was not observed in frog skin, as is the case in frog urinary bladder. The 8 Br-CAMP induced intracellular alkalinization effect was only observed in frog urinary bladder.

L8 ANSWER 107 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1985:252862 BIOSIS
DOCUMENT NUMBER: PREV198579032858; BA79:32858
TITLE: BIOCHEMICAL STUDIES ON THE OPTIMAL TIME FOR OPERATION ON IRRADIATED SKIN.
AUTHOR(S): MYOUKAI K [Reprint author]
CORPORATE SOURCE: DEP OTO-RHINO-LARYNGOL, HIROSHIMA UNIV SCH MED
SOURCE: Medical Journal of Hiroshima University, (1984) Vol. 32, No. 1, pp. 205-216.
CODEN: HDIZAB. ISSN: 0018-2087.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: JAPANESE

AB A combination of surgery and radiotherapy is frequently used in the treatment of malignant diseases of the head and neck region. The healing process of the wound is very different depending on the time of the surgery after radiation. Operation must be timed to the optimal period for healing if possible. In order to determine this optimal time for operation on irradiated skin, lipid peroxide and energy metabolism of the irradiated skin were studied. The flank skin of the guinea pig was given a single dose of 3000 rad with X-rays. At varying times from the 1st wk to the 12th wk after radiation, the skins were excised and frozen immediately in liquid N and extracts were prepared. Lipid peroxide was determined by the thiobarbituric acid colorimetric method and adenine nucleotides (ATP, ADP and AMP), glucose and lactate were determined by the couple enzymatic methods. The lipid peroxide level (nmol/mg protein) increased to 2.10 from 0.56 (the level of non-irradiated control skin) at the 1st wk after radiation, then decreased rapidly to 0.81 at the 4th wk and then increased again to 1.54 at the 8th wk. The high level of lipid peroxide

continued until the 12th wk. The ATP level (μmol/g wet wt) decreased to 0.310 from 0.602 (the level of control) at the 1st wk after radiation and then recovered temporarilly to 0.560 at the 4th wk. It decreased again to 0.299 at the 6th wk, 0.201 at the 8th wk and 0.150 and the 12th wk. The pattern of the change in ATP level showed a mirror image relationship to that of lipid peroxide. The level of total adenine nucleotides and energy charge (0.5 [ADP] + [ATP])/([AMP] + [ADP] + [ATP]) value changed in patterns similar to that of ATP level. The glucose level was maintained at the normal level until the 4th wk and then decreased 63% of control level at the 6th wk and 32% at the 12th wk. The lactate level showed a slight increase until the 4th wk, and then a continous increase during the period from the 6th to the 12th wk and reached the level 2-fold higher than the control skin at the 12th wk. The skin defect wound made at the 1st wk after radiation required 32.2 days for complete healing, the defect both made at the 2nd wk and the 4th wk, 25.0 days, the defect made at the 6th wk, 42.2 days, the defect made at the 8th wk, 48.8 days, and the defect made at the 12th wk did not show complete healing. The period from the 2nd to the 4th wk after radiation is the optimal time for operation on irradiated skin and the period after the 6th wk post-irradiation should be avoided for operation.

L8 ANSWER 108 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1985:259748 BIOSIS
DOCUMENT NUMBER: PREV198579039744; BA79:39744
TITLE: EVIDENCE FOR THE ROLE OF CALCIUM IN THE HYDROOSMOTIC RESPONSE TO ANTIDIURETIC HORMONE IN FROG RANA-ESCULENTA SKIN.
AUTHOR(S): SVELTO M [Reprint author]; CASAVOLA V
CORPORATE SOURCE: ISTITUTO DI FISIOLOGIA GENERALE, UNIVERSITA DI BARI, VIA AMENDOLA 165/A, I-70126 BARIN, ITALY
SOURCE: Pfluegers Archiv European Journal of Physiology, (1984) Vol. 402, No. 2, pp. 166-170.
CODEN: PFLABK. ISSN: 0031-6768.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Treatment with the calcium ionophore A23187 [calcimycin] on either the serosal or mucosal sides of frog skin, strongly inhibits the hydrosmotic response to vasopressin. The hydrosmotic response to 8-br-cAMP is not affected by treatment with the A23187. Trifluoperazine, a drug which inhibits the Ca2+-calmodulin complex, selectively inhibits vasopressin-induced water transport. Apparently, an increase in the intracellular concentration of Ca2+, obtained by treatment with the ionophore A23187, interferes with a pre-cAMP step of the hydrosmotic response to the antidiuretic hormone. Calcium ions could regulate adenyl-cyclase activity and consequently intracellular levels of cAMP. This effect may involve calmodulin.

L8 ANSWER 109 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1985:297692 BIOSIS
DOCUMENT NUMBER: PREV198579077688; BA79:77688
TITLE: RATIO OF THE LEVEL OF CYCLIC NUCLEOTIDES CALCITONIN AND LEVELS OF CELL-MEDIATED IMMUNITY IN PATIENTS WITH TRUE ECZEMA.
AUTHOR(S): KUBANOVA A A [Reprint author]; VASIL'EVA L L; ZOLOTUKHIN S V; SUCHKOVA SH N
CORPORATE SOURCE: DIV SKIN DIS, NI PIROGOV SECOND MOSC MED INST, MOSCOW, USSR
SOURCE: Vestnik Dermatologii i Venerologii, (1984) No. 7, pp. 16-20.
CODEN: VDVEAV. ISSN: 0042-4609.

DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: RUSSIAN
AB The content of cyclic nucleotides in the blood plasma, the level of calcitonin, and values of the cell-mediated immunity were studied in 86 patients with eczema. A significant increase in the level of 3.5-AMP in the blood of patients with eczema was established whereas the content of 3.5-GMP was within the normal range. At the peak of clinical manifestations patients with eczema developed an immunodeficient state marked by both a decline in the quantitative and functional values of T-lymphocytes, a decrease in the subpopulation of T-lymphocyte-helpers and a sharp decrease of spontaneous complementary neutrophils. The level of calcitonin in the blood plasma of patients with eczema was found to be higher than normal. Proceeding from these data, the combined treatment of patients with eczema included an immunocorrecting drug, diuciphone. This drug gave better therapeutic results and shortened the period of treatment. The positive changes of the skin process under the influence of diuciphone was combined with the improvement of the immunological values and normalization of the content of cyclic nucleotides in the blood plasma.

L8 ANSWER 110 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 37
ACCESSION NUMBER: 1984:266757 BIOSIS
DOCUMENT NUMBER: PREV198478003237; BA78:3237
TITLE: METABOLIC COMPENSATION FOR PROFOUND ERYTHROCYTE ADENYLATE KINASE DEFICIENCY A HEREDITARY ENZYME DEFECT WITHOUT HEMOLYTIC ANEMIA.
AUTHOR(S): BEUTLER E [Reprint author]; CARSON D; DANNAWI H; FORMAN L; KUHL W; WEST C; WESTWOOD B
CORPORATE SOURCE: DEP BASIC AND CLIN RES, SCRIPPS CLIN AND RES FOUND, LA JOLLA, CALIF 92037, USA
SOURCE: Journal of Clinical Investigation, (1983) Vol. 72, No. 2, pp. 648-655.
CODEN: JCINAO. ISSN: 0021-9738.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB A child with hemolytic anemia was found to have severe erythrocyte adenylate kinase (AK) deficiency, but an equally enzyme-deficient sibling had no evidence of hemolysis. No residual enzyme activity was found in erythrocytes by spectrophotometric methods that could easily have detected 0.1% of normal activity. Concentrated hemolysates were shown to have the capacity to generate small amounts of ATP and AMP from ADP after prolonged incubation. Hemolysates could also catalyze the transfer of labeled γ-phosphate from ATP to ADP. Intact erythrocytes were able to transfer phosphate from the γ-position of ATP to the β-position, albeit at a rate substantially slower than normal. They could also incorporate 14C-labeled adenine into ADP and ATP. Thus, a small amount of residual AK-like activity representing about 1/2000 of the activity normally present could be documented in the deficiency erythrocytes. The residual activity was not inhibited by N-ethyl-maleimide, which completely abolishes the activity of the normal AK1 isozyme of erythrocytes. The minute amount of residual activity in erythrocytes could represent a small amount of the AK2 isozyme, which has not been thought to be present in erythrocytes, or the activity of erythrocyte guanylate kinase with AMP substituting as substrate for GMP. Peripheral blood leukocytes, cultured skin fibroblasts, and transformed lymphoblasts from the deficient subject manifested about 17, 24 and 74%, respectively, of the activity of the concurrent controls. This residual activity is consistent with the existence of genetically independent AK isozyme, AK2, which is known to exist in these tissues.

The cause of hemolysis in the proband was not identified. Possibilities include an unrelated enzyme deficiency or other erythrocyte enzyme defect and interaction of another unidentified defect with AK deficiency.

L8 ANSWER 111 OF 221 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1983157192 EMBASE
TITLE: A retrospective study of 375 patients with genital herpes simplex infections seen between 1973 and 1980.
AUTHOR: Bierman, S.M.
CORPORATE SOURCE: Dep. Med., Univ. California Sch. Med., Los Angeles, CA, United States.
SOURCE: Cutis, (1983) Vol. 31, No. 5, pp. 548-552+557+560+562+565. ISSN: 0011-4162 CODEN: CUTIBC
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 013 Dermatology and Venereology
016 Cancer
037 Drug Literature Index
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Dec 1991
Last Updated on STN: 9 Dec 1991
AB A retrospective survey was performed to study the clinical course of 375 patients with genital herpes simplex infections seen between 1973 and 1980. Genital herpes simplex is increasingly being recognized as a disease of the affluent middle class. Recurrences in this study were most frequently associated with emotional stress (85.9 percent) and by coital friction (66 percent). The enormous psychological burden of this disease resulted in 42 percent of the patients withdrawing from sexual encounters. The study suggests a relatively low index of communicability (25.3 percent) to sexual partners even though neither topical nor systemically administered therapeutic agents seemed to significantly influence the course of disease. When curves were constructed based on patients' statements as to when they experienced a period of protracted remission from disease, 50 percent of those with genital herpes simplex were found to be essentially free of frequently recurring episodes within seven years after the onset of disease.

L8 ANSWER 112 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1983:123401 CAPLUS
DOCUMENT NUMBER: 98:123401
ORIGINAL REFERENCE NO.: 98:18773a,18776a
TITLE: Effect of some nucleotides, amiloride, and ions on active transport of ions by frog skin. Single membrane model
AUTHOR(S): Bessonov, B. I.; Butsuk, S. V.
CORPORATE SOURCE: Tikhookean. Okeanol. Inst., Vladivostok, USSR
SOURCE: Doklady Akademii Nauk SSSR (1983), 268(2), 478-81 [Biophys.]
CODEN: DANKAS; ISSN: 0002-3264
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The short-circuit current (SCC) and p.d. across isolated frog (Rana ridibunda) skin were not affected by the addition of ATP, AMP, or ADP at <1 μM to the solution bathing the external surface. However, the addition of 10-5-10-2M ATP to this solution caused increases in the SCC and p.d.
to 120% of the control values. Addition of ATP at these concns. to the solution
bathing the internal skin surface had no effect. Amiloride
(10-6M) addition to the external solution inhibited both SCC and p.d. ATP or K+

partially protected the skin from the effects of amiloride; ATP and K+ competed with one another in this respect. Concomitant addition of Mg2+ (10-7-10-3M) with amiloride and ATP caused an addnl. inhibition of SCC. The above results are reminescent of the properties of Na+,K+-ATPase. Probably, the cytoplasmic (Na+) center of the skin Na+,K+-ATPase is accessible to Na+, K+, Ca2+, Mg2+, ATP, ADP, AMP, and amiloride from the external solution, and this enzyme acts as the acceptor (gate) for the Na+ channel.

L8 ANSWER 113 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 38
ACCESSION NUMBER: 1984:115528 CAPLUS
DOCUMENT NUMBER: 100:115528
ORIGINAL REFERENCE NO.: 100:17457a,17460a
TITLE: Interrelationships between membrane-bound ATP-dependent energy systems, gastric mucosal damage produced by sodium hydroxide, hypertonic sodium chloride, hydrogen chloride and alcohol, and prostacyclin-induced gastric cytoprotection in rats
AUTHOR(S): Mozsik, G.; Moron, F.; Fiegler, M.; Javor, T.; Nagy, L.; Patty, I.; Tarnok, F.
CORPORATE SOURCE: 1st Dep. Med., Univ. Med. Sch., Pecs, H-7643, Hung.
SOURCE: Prostaglandins, Leukotrienes and Medicine (1983), 12(4), 423-36
CODEN: PLMEDD; ISSN: 0262-1746
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Rat gastric mucosal lesions (ulcers) were produced by topical application of 0.2 M NaOH, 25% NaCl, 0.6 M HCl, or 96% ethanol [64-17-5]. Different doses (5 and 50 μg/kg) of prostacyclin (PGI2) [35121-78-9] were given i.p. 30 min before administration of necrotizing agents, and their effects were studied on the number and severity of gastric lesions (ulcers). The gastric fundic mucosa was removed and tissue levels of ATP [56-65-5], ADP [58-64-0], AMP [61-19-8], and lactate [50-21-5] were determined enzymically, and the tissue content of cAMP [60-92-4] was measured by radioimmunoassay. The values of the adenylate pool (ATP + ADP + AMP), the ATP-to-ADP ratio, and the energy charge (ATP + 0.5 ADP/ATP + ADP + AMP) were calculated The tissue levels of ATP, cAMP, and AMP decreased significantly, whereas the tissue level of ADP increased (without statistical significance), in all models during the development of gastric mucosal damage. Lactate increased only in the model produced by 0.6 M HCl. PGI2 decreased dose-dependently the number and severity of gastric lesions (ulcers). The tissue level of ATP, the ATP-to-ADP ratio, and the energy charge were decreased, whereas ADP was increased, by PGI2 in all models. The tissue level of lactate and the adenylate pool remained unchanged during the PGI2 effects. Results are discussed in relation to the mechanism of gastric cytoprotection by prostacyclin.
OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L8 ANSWER 114 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 39
ACCESSION NUMBER: 1984:242901 BIOSIS
DOCUMENT NUMBER: PREV198477075885; BA77:75885
TITLE: ALTERATIONS IN PURINE SALVAGE AND HYPO XANTHINE LEVELS IN GRANULATION TISSUE DURING SKIN WOUND REPAIR.
AUTHOR(S): ROSSOMANDO E F [Reprint author]; BERTOLAMI C N
CORPORATE SOURCE: DEP ORAL BIOL, SCH DENT MED, UNIV CONN HEALTH CENT, FARMINGTON, CONN 06032, USA
SOURCE: Journal of Surgical Research, (1983) Vol. 35, No. 3, pp. 259-263.
CODEN: JSGRA2. ISSN: 0022-4804.
DOCUMENT TYPE: Article

FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB The levels of hypoxanthine in rabbit skin granulation tissue, harvested at different postwound intervals and from various locations within the wounds is reported. The effect of full-thickness autogenous skin grafts on hypoxanthine levels has also been examined. The levels of inosine, xanthine, adenosine 5'-monophosphate, and inosine 5'-monophosphate are reported. The correlation between the level of these compounds and the healing process suggests they may be useful indicators of the extent of tissue damage.

L8 ANSWER 115 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1984:214674 BIOSIS
DOCUMENT NUMBER: PREV198477047658; BA77:47658
TITLE: BIOSYNTHESIS OF PROTEO KERATAN SULFATE IN THE BOVINE CORNEA 1. ISOLATION AND CHARACTERIZATION OF A KERATAN SULFO TRANSFERASE EC-2.8.5.? AND THE ROLE OF SULFATION FOR THE CHAIN TERMINATION.
AUTHOR(S): KELLER R [Reprint author]; DRIESCH R; STEIN T; MOMBURG M; STUHLSATZ H W; GREILING H; FRANKE H
CORPORATE SOURCE: ABTEILUNG KLIN CHEM PATHOBIOCHEM KLINIKUMS RWTH AACHEN, FORCKENBECKSTRASSE, D-5100 AACHEN
SOURCE: Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie, (1983) Vol. 364, No. 3, pp. 239-252.
CODEN: HSZPAZ. ISSN: 0018-4888.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB Bovine corneal keratan sulfotransferase and chondroitin sulfotransferase were enriched 244-fold and 255-fold, respectively, from corneal stroma via tissue homogenizing, sequential centrifugation, gel chromatography and DEAE-cellulose chromatography. Sulfotransferase activity was detected in the microsomal fraction and in the cytosol. Keratan sulfotransferase and chondroitin sulfotransferase activity purified from the cytosol could not be separated from each other. The temperature optimum was found at 12° C for keratan sulfate and at 12° C and 25° C for chondroitin sulfate, the pH optimum at pH 6.0 and 8.6 for keratan sulfate and at pH 6.6 and 8.6 for chondroitin sulfate, as substrates. Both enzyme activities exhibit a Km value of 2.5 + 10-5 M. The molecular mass was determined by gel chromatography to be 240,000 Da [daltons]. Both enzymes are activated by Mn2+, Mg2+, Zn2+ and Co2+ and inhibited by Cu2+ at concentrations above 0.1 mM as well as at ATP, ADP and AdoPS [5'-adenylylsulfate (adenosine 5'-phosphosulfate)] concentrations above 0.08 mM. 2'-AMP, 3'-AMP, 5'-AMP and cAMP have less inhibitory effects. All adenine nucleotides investigated inhibited the 3'-phosphoadenylyl-sulfate hydrolase activity at concentrations higher than 0.08 mM. Iodoacetamide, iodoacetic acid, dithioerythritol, mercaptoethanol, cysteinium chloride and oxidized glutathion have no effect on the sulfotransferase activity at concentrations 0.08-5.0 mM. These substances strongly inhibit the 3'-phosphoadenylyl-sulfate hydrolase activity. Sulfate transfer by the purified enzyme could be detected in the case of bovine and porcine corneal keratan sulfates, and bovine corneal chondroitin sulfate but not in the case of hyaluronate, over-sulfated chondroitin sulfate from shark cartilage, glycosaminoglycan polysulfate (Arteparon), dermatan sulfate from porcine skin, and heparin from lung and mucosa as substrates. The purified enzyme transferred only into the 6-position of chondroitin sulfate. The enzyme activity decreased with increasing molecular mass and sulfation degree of the substrate keratan sulfate. A mathematical model was postulated, which describes in the case of corneal proteokeratan sulfate biosynthesis, how the biocatalysts deteriorate their own substrate during the synthesis of a

sulfated chain by increasing sulfation.

L8 ANSWER 116 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1984:186775 BIOSIS
DOCUMENT NUMBER: PREV198477019759; BA77:19759
TITLE: FORSKOLIN ACTIVATES ADENYLATE CYCLASE ACTIVITY AND INHIBITS MITOSIS IN IN-VITRO IN PIG EPIDERMIS.
AUTHOR(S): TAKEDA J [Reprint author]; ADACHI K; HALPRIN K M; ITAMI S; LEVINE V; WOODYARD C
CORPORATE SOURCE: VETERANS ADM MED CENT, 1201 NW 16TH ST, MIAMI, FLA 33125, USA
SOURCE: Journal of Investigative Dermatology, (1983) Vol. 81, No. 3, pp. 236-240.
CODEN: JIDEAE. ISSN: 0022-202X.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB The novel adenylate cyclase activator forskolin caused rapid and high intracellular accumulation of cAMP in a floating epidermal skin slice system. Increased cAMP levels were also detected in the media. Addition of a phosphodiesterase inhibitor to forskolin-containing medium caused only a slight increase in the intracellular cAMP level and forskolin itself did not inhibit phosphodiesterase activity. Ka of forskolin for epidermal adenylate cyclase was about 2-3 + 10-5 M. This forskolin activation was rapidly reversed after washing. The forskolin stimulation (Ka 5 + 10-5 M) was also found when tested with an epidermal membrane preparation which contained the catalytic unit of adenylate cyclase but lacked either the GTP or receptor stimulation. With the epidermal slice system, the combination of forskolin and epinephrine (or histamine) stimulated adenylate cyclase synergistically. Evidently forskolin activates not only the catalytic unit but also the nucleotide regulatory protein or the receptor-regulatory protein complex of the adenylate cyclase system. The cAMP accumulation caused by forskolin produced a dose-dependent mitotic inhibition of epidermal cells in an in vitro outgrowth system. This inhibitory effect was reversible 48 h after washing out the forskolin.

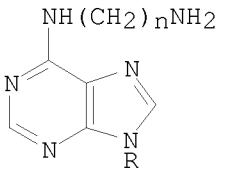
L8 ANSWER 117 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 40
ACCESSION NUMBER: 1983:325417 BIOSIS
DOCUMENT NUMBER: PREV198376082909; BA76:82909
TITLE: EFFECT OF PIRACETAM IN SOME MODELS OF GENERAL AND LOCAL DEPRESSION OF THE CORTICAL BIO ELECTRICAL ACTIVITY IN CATS.
AUTHOR(S): DIMOV S [Reprint author]; NIKOLOV R; NIKOLOVA M; MOYANOVA S
CORPORATE SOURCE: CHEMICAL PHARMACEUTICAL RES INST, 1-A KLIMENT OHRIDSKY, 1156 SOFIA, BULGARIA
SOURCE: Archives Internationales de Pharmacodynamie et de Therapie, (1983) Vol. 262, No. 1, pp. 13-23.
CODEN: AIPTAK. ISSN: 0003-9780.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB The effect of piracetam (100 mg/kg i.v.) [a nootropic drug] on general and local depression of the cortical bioelectrical activity was studied in acute experiments on cats. Asphyxic anoxia and hypoventilation hypoxia were used as models of general depression. Local depressions were caused by topical application of KCl, AMP and pentobarbital on the cortex. In the models of general depression, piracetam increased cortical resistance to hypoxia and accelerated the recovery of the cortical bioelectrical activity. In KCl- and AMP-induced depressions piracetam diminished their degree and duration and completely protected the cortex

against pentobarbital-caused depression.

L8 ANSWER 118 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1983:477 CAPLUS
DOCUMENT NUMBER: 98:477
ORIGINAL REFERENCE NO.: 98:99a,102a
TITLE: N6-ω-aminoalkyladenosines as allergy inhibitors
PATENT ASSIGNEE(S): Yamasa Shoyu Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57140716	A	19820831	JP 1981-26560	19810224 <--
EP 61001	A1	19820929	EP 1982-101303	19820219 <--
R: BE, CH, DE, FR, GB, IT, NL, SE				
AU 8280736	A	19820902	AU 1982-80736	19820223 <--

PRIORITY APPLN. INFO.: JP 1981-26560 A 19810224
OTHER SOURCE(S): CASREACT 98:477; MARPAT 98:477
GI



I

AB The adenosines I (n = 1-20; R = ribofuranosyl, 3-, or 5-phosphorylribofuranosyl, or 3,5-cyclic phosphorylribofuranosyl) are allergy inhibitors. Thus, the allergy inhibitory activities of 15 I were evaluated by the method of J. Goose et al., testing passive cutaneous anaphylaxis in rats injected with antiserum to ovalbumin, followed by an antigen (ovalbumin) 1 mg Evan's Blue/kg, and I. The ED50 of N6-(3-aminopropyl)-5'-AMP [78261-66-2] was 0.46 mg/kg, as the activity was measured by the diameter of dyed spots developed on the skin. Seventeen I were synthesized, e.g., by treating the 6-chloropurine derivs. with diaminoalkanes.
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 119 OF 221 TOXCENTER COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1983:90533 TOXCENTER
COPYRIGHT: Copyright 2010 ACS
DOCUMENT NUMBER: CA09801000477J
TITLE: N6-ω-aminoalkyladenosines as allergy inhibitors
CORPORATE SOURCE: ASSIGNEE: Yamasa Shoyu Co., Ltd.
PATENT INFORMATION: JP 82140716 A 31 Aug 1982
SOURCE: (1982) Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF.
COUNTRY: JAPAN
DOCUMENT TYPE: Patent
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 1983:477
LANGUAGE: Japanese

ENTRY DATE: Entered STN: 16 Nov 2001
Last Updated on STN: 5 Jan 2010

AB The adenosines I (n = 1-20; R = ribofuranosyl, 3-, or 5-phosphorylribofuranosyl, or 3,5-cyclic phosphorylribofuranosyl) are allergy inhibitors. Thus, the allergy inhibitory activities of 15 I were evaluated by the method of J. Goose et al., testing passive cutaneous anaphylaxis in rats injected with antiserum to ovalbumin, followed by an antigen (ovalbumin) 1 mg Evan's Blue/kg, and I. The ED50 of N6-(3-aminopropyl)-5'-AMP [78261-66-2] was 0.46 mg/kg, as the activity was measured by the diameter of dyed spots developed on the skin. Seventeen I were synthesized, e.g., by treating the 6-chloropurine derivs. with diaminoalkanes.

L8 ANSWER 120 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1983:201359 BIOSIS
DOCUMENT NUMBER: PREV198375051359; BA75:51359
TITLE: DEMONSTRATION OF 2' 3' CYCLIC NUCLEOTIDE 3' PHOSPHO HYDROLASE EC-3.1.4.37 IN CULTURED HUMAN SCHWANN CELLS.
AUTHOR(S): REDDY N B [Reprint author]; ASKANAS V; ENGEL W K
CORPORATE SOURCE: USC NEUROMUSCULAR CENT, DEP NEUROL, UNIV SOUTHERN CALIF SCH MED, 637 S LUCAS AVENUE, LOS ANGELES, CALIF 90017, USA
SOURCE: Journal of Neurochemistry, (1982) Vol. 39, No. 3, pp. 887-889.
CODEN: JONRA9. ISSN: 0022-3042.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Schwann cell cultures were established from adult human sural nerve biopsies. 2',3'-Cyclic nucleotide 3'-phosphohydrolase (CNPase) activity was estimated in the homogenates of those cells by a sensitive isotope assay by using [3H]2',3'-cAMP as substrate. A high level of CNPase activity was observed in cultured Schwann cells, whereas cultured human muscle and skin fibroblasts contained negligible levels of CNPase activity. CNPase of human Schwann cells followed typical enzyme-substrate kinetics, with an apparent Km of 1.6 mM for 2',3'-cAMP, and the enzyme was stimulated by detergents such as Triton X-100 and deoxycholate. It was inhibited by p-chloromercuricbenzoate and 2'-AMP. These properties are typical of CNPase isolated from adult brain and spinal cord. CNPase can serve as a new biochemical marker of normal cultured human Schwann cells and can be useful in analyzing the properties of cultured Schwann cells from patients with dysschwannian neuropathies.

L8 ANSWER 121 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 41

ACCESSION NUMBER: 1983:261649 BIOSIS
DOCUMENT NUMBER: PREV198376019141; BA76:19141
TITLE: CYTOTONIC ENTERO TOXIN FROM AEROMONAS-HYDROPHILA.
AUTHOR(S): LJUNGH A [Reprint author]; ENEROTH P; WADSTROM T
CORPORATE SOURCE: DEP CLIN MICROBIOL, KAROLINSKA HOSP, STOCKHOLM
SOURCE: Toxicon, (1982) Vol. 20, No. 4, pp. 787-794.
CODEN: TOXIA6. ISSN: 0041-0101.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB A. hydrophila produces 2 hemolysins, and an enterotoxin during growth. Enterotoxin, separated from the hemolysins, gave positive reactions in the rabbit intestinal loop test, the rabbit skin test and the mouse adrenal Y1 cell test. Neutralization experiments in the rabbit loop, rabbit skin and Y1 cell tests failed to demonstrate any immunological relationship between Aeromonas enterotoxin and cholera toxin or Escherichia coli heat-labile enterotoxin. Prior incubation of

Aeromonas enterotoxin with gangliosides did not inhibit the positive test results in these systems. A co-agglutination test with antiserum to purified cholera toxin was negative for Aeromonas enterotoxin, which thus seems to be immunologically distinct from cholera toxin. The Aeromonas enterotoxin induced steroid secretion in adrenal Y1 cells and increased the intracellular cAMP content of Y1 cells as well as of rabbit intestinal epithelial cells. It thus seems to act via the adenylate cyclase-cAMP pathway and should be classified as a cytotonic enterotoxin.

L8 ANSWER 122 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:542648 CAPLUS
DOCUMENT NUMBER: 97:142648
ORIGINAL REFERENCE NO.: 97:23727a,23730a
TITLE: Application of microfluorometry to cardiovascular surgery. II. Evaluation of the ischemic mitochondrial damage and the safety limit of the intermittent cold blood cardioplegia by means of myocardial metabolism
AUTHOR(S): Chiba, Yukio
CORPORATE SOURCE: Fac. Med., Kyoto Univ., Kyoto, 606, Japan
SOURCE: Archiv fuer Japanische Chirurgie (1982), 51(3), 439-49
CODEN: NIGHAE; ISSN: 0003-9152
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB An evaluation of the effects of intermittent cold blood cardioplegia on myocardial protection and ischemic mitochondrial damage by means of NADH fluorescence, myocardial PO2, high-energy phosphate compds., and mitochondrial respiratory function is described. In dogs placed on cardiopulmonary bypass, the aorta was clamped and a K+ cardioplegic solution was injected into the aortic root. The myocardial temperature was maintained at
15° by means of topical cooling. The blood collected from the oxygenator was supplemented with 20 mequiv/L of KCl, cooled to 4°, and infused into the aortic root from 100 cm height (10 mL/kg) at 30 min intervals. As soon as the aorta was clamped, the NADH fluorescence was increased and reached a plateau. At the time of infusion of the cold blood cardioplegic solution (CBC), the fluorescence decreased promptly to the baseline. However, when the ischemic time became more prolonged, the extent of the increase and the decrease of the fluorescence diminished gradually. On the other hand, myocardial PO2 decreased after the aortic clamping and reached a plateau in several min. By infusing CBC, myocardial PO2 increased and then, between 30 and 150 min, the degree of the increase of PO2 declined gradually, and after 180 min the degree of the increase became larger. The energy charge and the mitochondrial respiratory function were well preserved until 150 min of ischemia but began decreasing after 180 min. Apparently, intermittent cold blood cardioplegia allows prolonged aortic clamping (3 h) with great safety. After 180 min of myocardial ischemia, the mitochondrial respiratory chain is damaged and the O delivered by CBC is not used any more in mitochondria.

L8 ANSWER 123 OF 221 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1983074582 EMBASE
TITLE: Effects of vasoactive intestinal polypeptide (VIP) and cyclic-AMP on the isolated sphincter pupillae muscles of the albino rabbit.
AUTHOR: Hayashi, K.; Masuda, K.
CORPORATE SOURCE: Dep. Ophthalmol., Univ. Tokyo Sch. Med., Bunkyo-ku, Tokyo 113, Japan.
SOURCE: Japanese Journal of Ophthalmology, (1982) Vol. 26, No. 4,

pp. 437-442.
ISSN: 0021-5155 CODEN: JJOPA7
COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 012 Ophthalmology
003 Endocrinology
030 Clinical and Experimental Pharmacology
037 Drug Literature Index
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Dec 1991
Last Updated on STN: 9 Dec 1991

AB Iris sphincter muscle strips were dissected from the albino rabbit eye pretreated with 0.5% topical indomethacin and incubated in a Krebs-Ringer solution. Vasoactive intestinal polypeptide (VIP) was added to the incubated medium, and the effects on the tension of the sphincter pupillae muscles and the cyclic AMP (c-AMP) level in the musles were correlated. The c-AMP level in the muscles was determined by a radioimmunoassay method. VIP induced a relaxation of the sphincter muscles and a positive correlation was found between the VIP effects and the c-AMP levels. The ED50 was calculated to be 3.72 x 10-9 M. A significant increase in the c-AMP level occurred prior to the onset of muscle relaxation after VIP treatment (10-7 M), and a peak level of c-AMP was reached when the relaxation was almost completed. The sphincter muscles were treated with a c-AMP phosphodiesterase inhibitor, 1-methyl-3-isobutylxanthine (MIX) (10-5 M), 10 minutes prior to the experiment. This pretreatment enhanced the relaxation of the muscles induced by VIP.

L8 ANSWER 124 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:469819 CAPLUS
DOCUMENT NUMBER: 97:69819
ORIGINAL REFERENCE NO.: 97:11647a,11650a
TITLE: Phosphorus-31 nuclear magnetic resonance analysis of frog skin
AUTHOR(S): Lin, Liner; Shporer, Mordechai; Civan, Mortimer M.
CORPORATE SOURCE: Sch. Med., Univ. Pennsylvania, Philadelphia, PA, 19104, USA
SOURCE: American Journal of Physiology (1982), 243(1), C74-C80
CODEN: AJPHAP; ISSN: 0002-9513
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The intracellular phosphate composition of whole and split frog skins was studied by 31P NMR anal. The spectra were similar to those previously recorded from isolated epithelial cells of toad bladder. However, qual. differences were noted in comparison with spectra from whole toad bladder. The 31P spectra from whole frog skin reflect the intracellular compns. of the epithelial cells, whereas subepithelial elements contribute significantly to the total observed 31P signals from toad bladder. Analyzed at 4°, the average phosphocreatine (PCr) and ATP concns. of frog skin are of similar magnitude. The concentration ratio of PCr to ATP + ADP depends on time, tissue O tension, temperature, and extracellular inorg. phosphate concentration Both this ratio and the short-circuit current (measured in parallel expts.) fell during aeration of frog skins in Ringer's solution at room temperature The intracellular inorg. phosphate signal was identified. After reduction of extracellular pH, the signal did not shift immediately but subsequently did undergo an acid shift.

L8 ANSWER 125 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 42
ACCESSION NUMBER: 1982:74638 CAPLUS

DOCUMENT NUMBER: 96:74638
ORIGINAL REFERENCE NO.: 96:12189a,12192a
TITLE: Accelerating cellular repair composition for the human body and method of administering this composition
INVENTOR(S): Caspe, Saul
PATENT ASSIGNEE(S): USA
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4308257	A	19811229	US 1980-156190	19800603 <--

PRIORITY APPLN. INFO.: US 1980-156190 19800603
AB A s.c. injectable formulation comprising an amino acid metabolite, a thiamine salt, DPN [53-84-9], diaphorase flavin protein enzyme [9001-18-7], and a carrier, and an enteric-coated tablet comprising DPN, nicotinamide [98-92-0], 5'-adenylic acid [61-19-8], and a carrier administered as a 2-part treatment are effective for treatment of abnormal metabolic conditions such as ulcers, burns, postoperative wounds, and various skin disorders from diabetes. Thus, the effectiveness was demonstrated with an injectable composition containing creatine [57-00-1] 50, DPN 90, thiamin-HCl [67-03-8] 150, and diaphorase 0.1 mg which were added to 100mL aqueous saline solution containing PhOH 300 mg and an oral capsule was formulated with DPN 0.001, nicotinamide 0.1, 5'-adenylic acid 0.025, and lactose 0.124 g and then coated with 20 coats cellulose acetate phthalate.
OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L8 ANSWER 126 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:129592 CAPLUS
DOCUMENT NUMBER: 96:129592
ORIGINAL REFERENCE NO.: 96:21165a,21168a
TITLE: A mixture of placental and yeast extracts as an inhibitor of melanin formation
PATENT ASSIGNEE(S): Ichimaru Co., Ltd., Japan
SOURCE: Jpn. Tokkyo Koho, 9 pp.
CODEN: JAXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56044046	B	19811016	JP 1977-57931	19770519 <--
JP 53142515	A	19781212		

PRIORITY APPLN. INFO.: JP 1977-57931 A 19770519
AB The inhibitors of melanin formation are prepared by combining enzymic degradation products (low mol. weight peptides) of placenta with yeast exts. (NAD [53-84-9], NADP [53-59-8], AMP [61-19-8], ADP [58-64-0], ATP [56-65-5], etc.). For example, human placenta was washed, defatted, and extracted with benzene, butanol plus water, and ether to removal alkaline phosphatase, albumins, and globulins. The insol. tissues were treated with pronase, and the supernatant was combined with yeasts, coenzymes, and

nucleotides and used for the prevention of melanin formation in the skin.
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L8 ANSWER 127 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:31092 CAPLUS
DOCUMENT NUMBER: 96:31092
ORIGINAL REFERENCE NO.: 96:5093a,5096a
TITLE: Phosphorus nuclear magnetic resonance study of the rat kidney in vivo
AUTHOR(S): Balaban, Robert S.; Gadian, David G.; Radda, George K.
CORPORATE SOURCE: Dep. Biochem., Univ. Oxford, Oxford, UK
SOURCE: Kidney International (1981), 20(5), 575-9
CODEN: KDYIA5; ISSN: 0085-2538
DOCUMENT TYPE: Journal
LANGUAGE: English
AB 31P-NMR was used to study the metabolic state of kidneys in live, anesthetized rats without any surgery. To localize signals from the kidney, a radiofrequency surface coil was used in conjunction with the magnetic field profiling technique that is used for topical magnetic resonance. Signals were observed from P-containing metabolites including ATP and inorg. phosphate, and under certain conditions, intracellular pH can be estimated The ratio of free ATP to free ADP was higher than the ests. of 1.5-2.0 obtained from freeze-clamping studies. The 3P-NMR technique could be a clin. useful tool.
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 128 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:175046 CAPLUS
DOCUMENT NUMBER: 96:175046
ORIGINAL REFERENCE NO.: 96:28743a,28746a
TITLE: The influence of cyclic 3',5'-adenosine monophosphate on granulation tissue formation
AUTHOR(S): Kanta, Jiri; Tomeckova, Vlasta; Voseckova, Alena; Bartos, Frantisek
CORPORATE SOURCE: Dep. Normal Pathol. Physiol., Hradec Kralove, 500 38, Czech.
SOURCE: Sbornik Vedeckych Praci Lekarske Fakulty Univerzity Karlovy v Hradci Kralove (1981), 24(4), 521-5
CODEN: SVLKAO; ISSN: 0049-5514
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Solns. of cAMP [60-92-4] (0.5 and 5 mM) and 5'-AMP [61-19-8] (5 mM) were applied for 5 days to the granulation tissue forming in open skin wounds in rats. The weight of the tissue increased by 10-25% and the DNA content by 10-35% after treatment. CAMP (5 mM) applied together with theophyllin [58-55-9] (1 mM) increased the hydroxyproline [51-35-4] content of the tissue by 30%. These changes disappeared 3 days after treatment ceased.

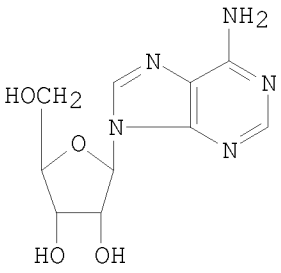
L8 ANSWER 129 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 43
ACCESSION NUMBER: 1982:211049 BIOSIS
DOCUMENT NUMBER: PREV198273071033; BA73:71033
TITLE: CYCLIC AMP ACCUMULATION IN PSORIATIC SKIN DIFFERENTIAL RESPONSES TO EPINEPHRINE AMP AND HISTAMINE.
AUTHOR(S): IIZUKA H [Reprint author]
CORPORATE SOURCE: DEP DERMATOL, HOKKAIDO UNIV SCH MED
SOURCE: Hokkaido Journal of Medical Science, (1981) Vol.

56, No. 4, pp. 449-454.
CODEN: HOIZAK. ISSN: 0367-6102.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: JAPANESE
AB Epidermal adenylate cyclase can be activated independently by epinephrine, adenosine and histamine resulting in the accumulation of cAMP. Using the uninvolved and involved keratome-sliced skin from psoriatic patients, the effects of these agents in vitro on the intracellular cAMP levels of the skin were investigated. In the involved skin of psoriasis, epinephrine-induced cAMP accumulation was decreased, whereas no decrease in adenosine- or histamine-induced cAMP accumulation was seen. Since keratome-sliced skin samples had various amounts of dermal contamination, the effect of epinephrine on the pure epidermal cAMP level was studied. After incubation with epinephrine, pure epidermal samples, which were micro-dissected free from stratum corneum, dermis and skin appendages, were assayed for cAMP Level. cAMP accumulation decreased in the involved skin. Epinephrine-induced cAMP accumulation decreased in the involved epidermis of psoriasis.

L8 ANSWER 130 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 44
ACCESSION NUMBER: 1982:239788 BIOSIS
DOCUMENT NUMBER: PREV198274012268; BA74:12268
TITLE: ATP EVOKED VASCULAR CHANGES IN HUMAN SKIN MECHANISM OF ACTION.
AUTHOR(S): COUTTS A A [Reprint author]; JORIZZO J L; EADY R A J; GREAVES M W; BURNSTOCK G
CORPORATE SOURCE: INST DERMATOL, ST JOHN'S HOSP DIS SKIN, HOMERTON GROVE, LONDON E9 6BX, UK
SOURCE: European Journal of Pharmacology, (1981) Vol. 76, No. 4, pp. 391-402.
CODEN: EJPHAZ. ISSN: 0014-2999.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB ATP, ADP, AMP, adenosine, adenine and inosine were injected intradermally into the backs of human volunteers. ATP, ADP and AMP evoked weal and flare responses in the skin in a dose-dependent manner. The rank order of potency was ATF > ADP > AMP; other metabolites were apparently inactive. The potency of ATP was approximately 0.002 times that of histamine. In the forearm, cross tachyphylaxis was demonstrated between ATP and histamine weals; also the flare due to injected ATP spread beyond a band which was applied to prevent diffusion, indicating that the flare is neurogenic. Injections of ATP and high doses of ADP produced a sensation of persistent pain, unlike histamine which produced transient pain or itch on some occasions, and saline which was without effect. The possible involvement of histamine, mast cells and prostaglandins in the response was examined. The inhibitory actions of systemic pretreatment with diphenhydramine suggests that the erythema and wealing responses to ATP are at least partly due to ATP-evoked histamine release. Indomethacin, doxantrazole and cimetidine did not alter the ATP reaction.

L8 ANSWER 131 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1981:202669 CAPLUS
DOCUMENT NUMBER: 94:202669
ORIGINAL REFERENCE NO.: 94:33051a,33054a
TITLE: Effect of purine nucleosides and nucleotides on the in vivo radiation response of normal tissue in the rat
AUTHOR(S): Weissberg, Joseph B.; Fischer, James J.
CORPORATE SOURCE: Sch. Med., Yale Univ., New Haven, CT, 06510, USA

SOURCE: International Journal of Radiation Oncology, Biology, Physics (1981), 7(3), 365-9
CODEN: IOBPD3; ISSN: 0360-3016
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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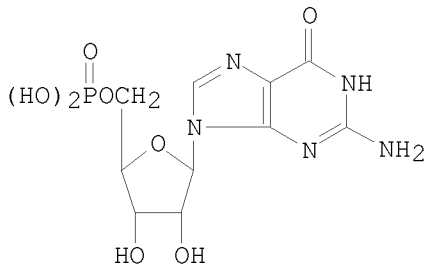
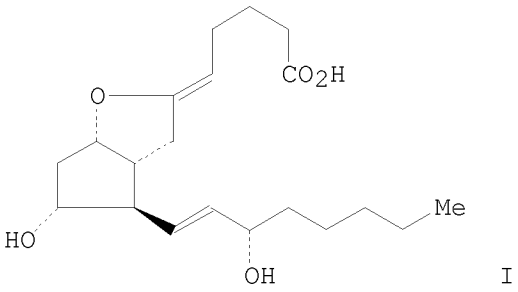


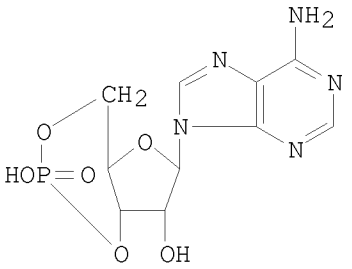
II

AB I.p. injection of an inosine-pyruvate-Na2HPO4 mixture (IPP) [77679-33-5] into rats protected the skin against damage by x-irradiation Radioprotection was also conferred by inosine [58-63-9] alone, adenosine (I) [58-61-7], guanosine [118-00-3], IMP [131-99-7], AMP [61-19-8], GMP (II) [85-32-5], and cAMP [60-92-4], but not by the purine bases hypoxanthine [68-94-0], adenine [73-24-5], and guanine [73-40-5]. Although IPP and inosine decreased the blood pressure, AMP and cAMP did not, suggesting that some mechanism other than tissue hypoxia must account for the radioprotective effect of the latter compds. Although treatment of stored blood with IPP increases erythrocyte diphosphoglycerate content and therefore would be expected to increase tissue oxygenation and hence radiosensitivity, precisely the contrary was actually observed in these expts.
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 132 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1981:436126 CAPLUS
DOCUMENT NUMBER: 95:36126
ORIGINAL REFERENCE NO.: 95:6118h,6119a
TITLE: Biochemical aspects of cytoprotective effect of prostacyclin on rat gastric mucosal damage induced by topical hydrochloric acid
AUTHOR(S): Fiegler, M.; Bata, M.; Lovasz, L.; Kutor, G.; Mozsik, G.
CORPORATE SOURCE: Med. Sch., Univ. Pecs, Pecs, H-7643, Hung.
SOURCE: Adv. Physiol. Sci., Proc. Int. Congr., 28th (1981), Meeting Date 1980, Volume 29, Issue Gastrointest. Def. Mech., 277-88. Editor(s): Mozsik, Gy.; Hanninen, O.; Javor, T. Akad. Kiado: Budapest, Hung.
CODEN: 45TGAW
DOCUMENT TYPE: Conference
LANGUAGE: English
GI



I



II

AB PGI2 (I) [35121-78-9] caused a dose-dependent inhibition of the number and severity of ulcers produced by topical application of 0.6M HCl to the stomach mucosa of rats. The gastric mucosal levels of ATP [56-65-5], cAMP (II) [60-92-4], and AMP [61-19-8] decreased during acid-induced ulceration whereas the tissue levels of ADP [58-64-0] and lactate [50-21-5] increased. After treatment with I, tissue ATP decreased further in rats with HCl-induced ulcers, whereas the levels of AMP, and II were dose-dependently increased and the levels of ADP and lactate were unchanged. The results are discussed with respect to the cytoprotective action of I.

L8 ANSWER 133 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 45
ACCESSION NUMBER: 1981:132558 CAPLUS
DOCUMENT NUMBER: 94:132558
ORIGINAL REFERENCE NO.: 94:21563a,21566a
TITLE: Inhibition of epidermal adenyl cyclase by lithium carbonate
AUTHOR(S): DiGiovanna, John J.; Aoyagi, Takashi; Taylor, J. Richard; Halprin, Kenneth M.
CORPORATE SOURCE: Sch. Med., Univ. Miami, Miami, FL, USA
SOURCE: Journal of Investigative Dermatology (1981), 76(4), 259-63
CODEN: JIDEAE; ISSN: 0022-202X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB An in vitro floating system was used to investigate the effect of Li2CO3 on the activity of adenyl cyclase [9012-42-4] in normal pig epidermis. Li2CO3 decreased the responsiveness of adenyl cyclase to stimulation by histamine [51-45-6], 5'-AMP [61-19-8], and epinephrine [51-43-4]. Involved and uninvolved skin from a psoriatic on Li therapy demonstrated decreased responsiveness to in vitro stimulation by epinephrine, histamine, and adenosine [58-61-7] when compared to skin from psoriatics who were not on Li therapy. Li therapy apparently worsens psoriatic lesions.
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 134 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1981:530169 CAPLUS
DOCUMENT NUMBER: 95:130169
ORIGINAL REFERENCE NO.: 95:21778h,21779a
TITLE: Metabolism, tissue metabolites and enzyme activities in the fossorial mole rat, Heterocephalus glaber
AUTHOR(S): Moon, Thomas W.; Mustafa, Tario; Joergensen, Joergen B.
CORPORATE SOURCE: Dep. Biol., Univ. Ottawa, Ottawa, ON, K1N 6N5, Can.
SOURCE: Molecular Physiology (1981), 1(4), 179-94
CODEN: MOPHDP; ISSN: 0166-3178
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The metabolism, tissue enzyme profiles, and muscle structure of the fossorial mole rat, H. glaber, were studied. No evidence was obtained for an increase in metabolic rate at 40-11° for this animal. Body temperature (Tb) closely paralleled ambient temperature (Ta) within this thermal range. Neither metabolism nor skin conductance followed the predictions of the Kleiber and heat transfer formula, resp. Enzymic activities are generally lower than reported for other mammals, although metabolite concns. are in the expected range. The skeletal muscles of H. glaber are visibly red, and microscopic evidence generally supports the slow character of the muscle. It is apparent that the slow nature of H. gaber is a result of the reduced enzymic potential and the nature of its locomotion musculature. Metabolism is principally aerobic, with carbohydrate the immediate fuel and fats contributing during times of food deprivation. These characteristics are examined in light of the habitat of this naked mole rat.

L8 ANSWER 135 OF 221 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1981111791 EMBASE
TITLE: The action of norepinephrine in the rat hippocampus: Intracellular studies in the slice preparation.
AUTHOR: Segal, M.
CORPORATE SOURCE: Dept. Isot. Res., Weizmann Inst. Sci., Rehovot, Israel.
SOURCE: Brain Research, (1981) Vol. 206, No. 1, pp. 107-128.
ISSN: 0006-8993 CODEN: BRREAP
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 002 Physiology
037 Drug Literature Index
008 Neurology and Neurosurgery
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Dec 1991
Last Updated on STN: 9 Dec 1991
AB The ionic basis of norepinephrine (NE) action was studied with intracellular recording techniques in the rat hippocampal slice. Topical application of NE caused, in CA1 neurons, a 3-4 mV hyperpolarization associated with a 10-20% decrease in input resistance. This effect was accompanied by a decrease in spontaneous action potential discharges and, in some cells, by a reduction in EPSPs produced by stimulation of the excitatory Schaffer collateral-commissural pathway. An analysis of the voltage and concentration dependency revealed that NE may activate two different mechanisms. Experiments performed to test this hypothesis have demonstrated that a short duration hyperpolarizing responses to NE were absent in ouabain-treated slices and in low temperature. cyclic AMP produced a 3-4 mV hyperpolarization associated with minimal changes in input resistance. This effect of cAMP was blocked by ouabain. IBMX potentiated responses to low concentrations of NE. It is proposed that NE activates two mechanisms; one involves actiation of C1- conductance and the other activation of a Na+-K+ pump. this latter

effect might be mediated by cAMP.

L8 ANSWER 136 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1982:50040 CAPLUS
DOCUMENT NUMBER: 96:50040
ORIGINAL REFERENCE NO.: 96:8231a,8234a
TITLE: Studies on pyrophosphate diesterase activity in cultured human fibroblasts: a deficiency in Niemann-Pick disease
AUTHOR(S): Besley, Guy T. N.; Moss, Stephen E.
CORPORATE SOURCE: Dep. Pathol., R. Hosp. Sick Children, Edinburgh, EH9 1LF, UK
SOURCE: Clinica Chimica Acta (1981), 117(1), 75-84
CODEN: CCATAR; ISSN: 0009-8981
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Skin fibroblast phosphodiesterase activity was studied using 4-methylumbelliferyl pyrophosphate diester as substrate. Release of the fluorogen, 4-methylumbelliferone, was dependent on acid phosphatase activity, normally present in excess in crude cell exts. Phosphodiesterase activity had an acid pH optimum, was deficient in Niemann-Pick disease fibroblasts compared to controls, and, when assayed in the presence of exogenous acid phosphatase, had an identical electrofocusing profile to that of sphingomyelinase. Apparently, 4-methylumbelliferyl pyrophosphate diesterase and acid sphingomyelinase activities are dependent on the same enzyme.
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 137 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1980:267337 BIOSIS
DOCUMENT NUMBER: PREV198070059833; BA70:59833
TITLE: THE EFFECT OF STEROID AND DITHRANOL THERAPY ON CYCLIC NUCLEOTIDES IN PSORIATIC EPIDERMIS.
AUTHOR(S): SAIHAN E M [Reprint author]; BANO J; BURTON J L; ET AL
CORPORATE SOURCE: DERMATOL DEP, LOND HOSP, WHITECHAPEL, LONDON, ENGL, UK
SOURCE: British Journal of Dermatology, (1980) Vol. 102, No. 5, pp. 565-570.
CODEN: BJDEAZ. ISSN: 0007-0963.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB Absolute values of c[cyclic]AMP and cGMP levels were measured in the involved and uninvolved skin of psoriatic patients, and the effect of topical therapy on these levels in the involved skin was studied. The mean cGMP level in the untreated psoriatic plaque was increased by 300% compared to the non-involved skin (which did not differ from normal skin), but no significant difference in cAMP levels was found. Epidermal stripping of uninvolved skin, which stimulates cell proliferation, did not change the cGMP level. Treatment of the psoriasis with dithranol caused the cGMP levels to return to normal, but a potent, topical glucocorticoid produced no such decrease. The 2 drugs may act at different levels in suppressing cell replication, and dithranol may be a useful tool for the further investigation of cyclic nucleotide metabolism.

L8 ANSWER 138 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1980:545641 CAPLUS
DOCUMENT NUMBER: 93:145641
ORIGINAL REFERENCE NO.: 93:23171a,23174a
TITLE: Monitoring of column effluents for radioactivity by

continuous liquid scintillation counting
AUTHOR(S): Bakay, Bohdan
CORPORATE SOURCE: Dep. Pediatr., Univ. California, La Jolla, CA, USA
SOURCE: Liq. Scintill. Counting: Recent Appl. Dev., [Proc. Int. Conf.] (1980), Meeting Date 1979, Volume 2, 141-7. Editor(s): Peng, Chin-Tzu; Horrocks, Donald L.; Alpen, Edward L. Academic: New York, N. Y. CODEN: 43VNAF
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Isotope measurement in column effluents during high-performance liquid chromatog. (HPLC) of purine bases, nucleosides, and nucleotides was carried out by mixing column effluent with liquid scintillation fluid and passing it through a hollow flow cell. The quantitation of UV-sensitive compds. was carried out simultaneously with radioactivity measurements and was completed in 2 h. The main components of the apparatus were a gradient mixer and a 50 cm + 2 mm stainless steel column packed with Aminex A25 ion-exchange resin. The gradient mixer produced a linear gradient in which the concentration of tetraborate and pH decreased, and the concentration of NH_4Cl increased. A gel pump was used to segment the scintillation fluid stream to prevent spreading of sep. compds. The method gave good separation for most of the components of a saturated mixture of purine bases, nucleosides, and nucleotides. The method was used to establish the mol. causes of abnormal purine metabolism in hyperuricemic patients by incubating skin fibroblasts with 14C precursors, such as hypoxanthine-14C (I), and HPLC of the cell exts. Under the incubation conditions used, all known metabolism pathways of purine metabolism were operable. Moreover, the anal. of acid-soluble exts. from the cells of patients who were overproducing uric acid showed that the total amount of I utilized by the cells of some patients was different than in normal cells, and that cells of each patient utilized the precursor in a different way.

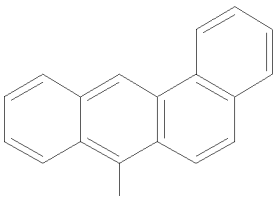
L8 ANSWER 139 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 46
ACCESSION NUMBER: 1980:423236 CAPLUS
DOCUMENT NUMBER: 93:23236
ORIGINAL REFERENCE NO.: 93:3897a,3900a
TITLE: Adenosine diphosphate ribose pyrophosphohydrolase in human skin
AUTHOR(S): Kim, Young Pio; Kahng, Johng; Choi, Jum Yul
CORPORATE SOURCE: Dep. Dermatol., Chonnam Univ. Med. Sch., Chonnam, S. Korea
SOURCE: Journal of Dermatology (1980), 7(1), 11-15
CODEN: JDMYAG; ISSN: 0385-2407
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Adenosine diphosphate ribose (ADPR) pyrophosphohydrolase (ADPR-PPase), which catalyzes the hydrolysis of ADPR to yield AMP and ribose 5'-phosphate, was assayed in human penile foreskin. Since ADPR is formed from NAD by NAD glycohydrolase (NADase), NADase was also assayed in human skin. The skin tissue obtained by circumcision was separated into 3 layers: the epidermis of the outer prepuce, the epidermis of the inner prepuce, and the dermis. ADPR-PPase was present in all 3 layers with nearly equal activity. NADase was also present in the epidermis of both the outer and inner prepuce, being .apprx.2-fold higher in the latter, but no activity was found in the dermis. When expressed in units of the same sp. activity, the ADPR-PPase of human skin had 2-5-fold greater activity than did NADase. The ADPR-PPase of human skin was activated by Mg^{2+}, but inhibited by AMP and ATP. Evidently, the breakdown of NAD occurs in human skin via ADPR to AMP and ribose 5'-phosphate by sequential action of NADase and ADPR-PPase.

L8 ANSWER 140 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1980:189478 BIOSIS
DOCUMENT NUMBER: PREV198069064474; BA69:64474
TITLE: 5' NUCLEOTIDASE EC-3.1.3.5 SOLUBILIZATION RADIOCHEMICAL ANALYSIS AND ELECTROPHORESIS.
AUTHOR(S): TUCKER-PIAN C [Reprint author]; BAKAY B; NYHAN W L
CORPORATE SOURCE: DEP PEDIATR, SCH MED, UNIV CALIF SAN DIEGO, LA JOLLA, CALIF 92093, USA
SOURCE: Biochemical Genetics, (1979) Vol. 17, No. 11-12, pp. 995-1006.
CODEN: BIGEBA. ISSN: 0006-2928.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB 5'-Nucleotidase (5'-NT, EC 3.1.3.5) of cultured human and rodent cells was rendered soluble using the zwitterionic detergent Zwittergent 314. Optimal activity of 5'-NT was obtained when sonicated cells were incubated in solutions containing 0.75% (wt/vol) Zwittergent. A method was developed for the determination of the activity of 5'-NT where the unutilized substrate, [14C]-AMP, was precipitated with LaCl3 and the soluble [14C]-adenosine was measured by scintillation counting. 5'-NT isozymes were separated using agarose gel electrophoresis and isoelectric focusing in polyacrylamide gel. The zones of enzyme activity were established by precipitation of unutilized [14C]-AMP with LaCl3, removal of soluble [14C]-adenosine by washing gels in water, and autoradiography. The zones of 5'-NT appeared as clear zones on darkened X-ray film. When analyzed by agarose gel electrophoresis, fibroblasts derived from human skin and rat liver produced a single zone of 5'-NT activity. The 5'-NT isozyme of rat cells migrated faster than that of human cells and was easy to distinguish. The presence of detergent in the sample and in the gel enhanced enzymatic activity and improved the separation of the isozymes. Isoelectric focusing resolved 5'-NT of human fibroblasts into 2 molecular forms, 1 of which focused in the region of pH 6 and the other at pH 5.

L8 ANSWER 141 OF 221 MEDLINE on STN
ACCESSION NUMBER: 1980053353 MEDLINE
DOCUMENT NUMBER: PubMed ID: 502572
TITLE: Cold-blood potassium cardioplegia: evaluation of glutathione and postischemic cardioplegia.
AUTHOR: Standeven J W; Jellinek M; Menz L J; Hahn J W; Barner H B
SOURCE: The Journal of thoracic and cardiovascular surgery, (1979 Dec) Vol. 78, No. 6, pp. 893-907.
Journal code: 0376343. ISSN: 0022-5223. L-ISSN: 0022-5223.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 198001
ENTRY DATE: Entered STN: 15 Mar 1990
Last Updated on STN: 15 Mar 1990
Entered Medline: 28 Jan 1980
AB Potassium (34 mEq/L) cardioplegia was induced with cold blood (CBK) in three groups of six dogs undergoing 60 minutes of myocardial ischemia at a systemic temperature of 27 degrees +/- 2 degrees and a myocardial temperature of 7 degrees +/- 2 degrees C (crushed ice). Group 1 (CBK) animals were reperfused initially with 400 ml cold blood over 8 to 10 minutes at increasing pressures of up to 75 mm Hg. Group II (CBK-K) dogs were reperfused in the same manner as Group I with the addition of

potassium chloride, 30 mEq/L. In Group III (CBKG-KG) glutathione, 30 mg/100 ml, was added to both the pre- and postischemic perfusions with CBK. After 30 minutes of reperfusion control studies were repeated. Heart rate, peak systolic pressure, rate of rise of left ventricular pressure, maximum velocity of contractile element, pressure-volume curves, coronary flow distribution, muscle stiffness, and heart water were not significantly different from control values. Total coronary flow and myocardial uptake of oxygen, lactate, and pyruvate did not serve to separate the three groups; the same was true for right ventricular creatine phosphate, adenosine triphosphate, and adenosine diphosphate during ischemia and recovery. Ultrastructural myofibrillar lesions were noted in all groups. thus, postischemic cardioplegia and use of a physiological reducing agent do not enhance CBK cardioplegia with topical and systemic hypothermia.

L8 ANSWER 142 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 47
ACCESSION NUMBER: 1980:35655 CAPLUS
DOCUMENT NUMBER: 92:35655
ORIGINAL REFERENCE NO.: 92:5907a,5910a
TITLE: Hydroxylation and conjugation at the benzylic carbon atom: a possible mechanism of carcinogenic activation for some methyl-substituted aromatic hydrocarbons
AUTHOR(S): Cavalieri, E.; Roth, R.; Rogan, E.
CORPORATE SOURCE: Eppley Inst. Res. Cancer, Univ. Nebraska, Omaha, NE, 68105, USA
SOURCE: Polynucl. Aromat. Hydrocarbons, Int. Symp. Chem. Biol. - Carcinog. Mutagen., 3rd (1979), Meeting Date 1978, 517-29. Editor(s): Jones, Peter W.; Leber, Philip. Ann Arbor Sci.: Ann Arbor, Mich. CODEN: 41WSAL
DOCUMENT TYPE: Conference
LANGUAGE: English
GI



I

AB 7-Acetoxymethylbenz[a]anthracene (I) [17526-24-8] was a stronger carcinogen than 7-hydroxymethylbenz[a]anthracene (II) [16110-13-7] which was a stronger carcinogen than 7-methylbenz[a]anthracene [2541-69-7] when 0.4 or 0.8 μmol was applied to the skin twice weekly for 25 wk. 7-Formylbenz[a]anthracene [7505-62-6] was a slightly weaker carcinogen than II and 7-ethylbenz[a]anthracene [3697-30-1] was a very weak carcinogen. II bound to DNA in the presence of ATP [56-65-5]; ADP [58-64-0] mediated the binding half as well as ATP and AMP [61-19-8] effected no binding. Of a series of 6 substituted benz[a]anthracenes evaluated, Na benzo[a]pyrene-6-methanol hydrogen sulfate [68041-18-9] was the most carcinogenic. Since benzylic C hydroxylation is a major metabolic pathway, the high carcinogenicity of the benzylic esters suggests that these esters may contribute to polycyclic aromatic hydrocarbon carcinogenicity.
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L8 ANSWER 143 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1980:126002 CAPLUS
DOCUMENT NUMBER: 92:126002
ORIGINAL REFERENCE NO.: 92:20521a,20524a
TITLE: Oxidative phosphorylation in rat skin during preservation
AUTHOR(S): De Loecker, W.; De Wever, F.
CORPORATE SOURCE: Fac. Med., Univ. Louvain, Louvain, Belg.
SOURCE: Cryobiology (1979), 16(6), 517-25
CODEN: CRYBAS; ISSN: 0011-2240
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The addition of NaH_2PO_4 to storage buffers resulted in markedly higher intracellular ATP concns. in rat skin stored at -196° and -3° as compared to storage in phosphate-free medium. The inorg. and total P depletion occurring in phosphate-free buffers was compensated for by the addition of NaH_2PO_4 to the storage medium. The stimulatory effect of NaH_2PO_4 on the metabolic activity of stored tissue was attributed to an effective protection of oxidative phosphorylation. This was achieved by providing for the essential phosphate compds. necessary for constant resynthesis of ATP.

L8 ANSWER 144 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 48
ACCESSION NUMBER: 1979:240208 BIOSIS
DOCUMENT NUMBER: PREV197968042712; BA68:42712
TITLE: INITIATION PROMOTION SKIN CARCINOGENESIS INHIBITION BY CYCLIC AND NONCYCLIC NUCLEOTIDES.
AUTHOR(S): CURTIS G L [Reprint author]; STENBACK F; RYAN W L
CORPORATE SOURCE: UNIV NEBR MED CENT, 3018 S LAB BUILD, OMAHA, NEBR 68105, USA
SOURCE: Cancer Letters, (1979) Vol. 6, No. 4-5, pp. 291-300.
CODEN: CALEDQ. ISSN: 0304-3835.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB The effect of nucleotides on initiation-promotion skin carcinogenesis in Swiss mice was investigated. Cyclic[c]AMP was given before initiation with DMBA [7,12-dimethyl benzanthracene, a carcinogen], between initiation and promotion, and at the same time as promotion with croton oil. cAMP was more effective in inhibiting tumor development when injected at the same time as promotion with croton oil. 5'-AMP and cGMP were as effective as cAMP in inhibiting tumor development under these conditions. Adenosine, dibutyryl-cAMP and 5'-GMP were ineffective.

L8 ANSWER 145 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 49
ACCESSION NUMBER: 1979:214480 BIOSIS
DOCUMENT NUMBER: PREV197968016984; BA68:16984
TITLE: EFFECTS OF CHANGES IN CORTICAL EXCITABILITY UPON THE EPILEPTIC BURSTS IN GENERALIZED PENICILLIN EPILEPSY OF THE CAT.
AUTHOR(S): GLOOR P [Reprint author]; PELLEGRINI A; KOSTOPOULOS G K
CORPORATE SOURCE: CLIN NEUROL UNIV, GIUSTINIANI 1, 35100 PADUA, ITALY
SOURCE: Electroencephalography and Clinical Neurophysiology, (1979) Vol. 46, No. 3, pp. 274-289.
CODEN: ECNEAZ. ISSN: 0013-4694.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Previous studies had suggested that the epileptic bursts of feline generalized penicillin epilepsy represent the response of hyperexcitable cortex to thalamocortical volleys normally evoking spindles. If this were the case, it should be possible to convert the epileptic bursts of generalized penicillin epilepsy into spindles by decreasing the excitability of cortical neurons. In cats exhibiting the EEG signs of feline generalized penicillin epilepsy cortical excitability was decreased by hypoxia, by the topical application to the cortex of KCl (inducing spreading depression), barbiturates, GABA, AMP or noradrenaline [norepinephrine]. During generalized penicillin epilepsy, hypoxia and KCl-induced spreading depression abolished epileptic bursts which were replaced by spindles. When spindles and epileptic complexes occurring in the same animal were compared, a direct correlation between the frequencies of these 2 rhythms could be demonstrated, that of the epileptic complexes being about 1/2 that of the spindle waves. The epileptic bursts of feline generalized penicillin epilepsy are induced by thalamocortical volleys normally involved in spindle genesis. Topical cortical applications of barbiturates, GABA, AMP and noradrenaline reduced or inverted the negative spikes of the spike and wave complexes, while augmenting the negative slow waves, or revealing them clearly in instances in which they had been poorly developed. This effect is due to a selective inactivation of the superficial cortical layers. That topical cortical application of barbiturates, GABA, AMP and noradrenaline was capable of transforming into typical spike and wave complex epileptic bursts, which had not previously conformed to this pattern, indicates that the intracortical electrophysiological events of typical and atypical epileptic bursts in feline generalized penicillin epilepsy are fundamentally the same and reflect an alternation between excitatory and inhibitory sequences.

L8 ANSWER 146 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1979:554908 CAPLUS
DOCUMENT NUMBER: 91:154908
ORIGINAL REFERENCE NO.: 91:24961a,24964a
TITLE: Utilization of fructose-1,6-diphosphate as glycolytic substrate in bovine lens homogenates
AUTHOR(S): Korte, Inge; Hockwin, Otto; Kaskel, Dieter
CORPORATE SOURCE: Inst. Exp. Ophthalmol., Univ. Bonn, Bonn, Fed. Rep. Ger.
SOURCE: Documenta Ophthalmologica Proceedings Series (1979), 18(Prog. Anterior Eye Segment Res. Pract.), 163-73
CODEN: DOPSBP; ISSN: 0303-6405
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cortex and nucleus of bovine lenses of different ages were homogenized and incubated in the presence of glucose at 37° for different periods. A balance of the free adenine nucleotides was produced, which was nearly independent of the amount of glucose added (12.5; 25; 37 mM) and showed certain deviations from the physiol. values. These might be due to a decreased rate of glycolytic catabolism. Possibly the phosphorylation of the glucose, which is present in sufficient amts., is inhibited. When, for instance, fructose 1,6-diphosphate (FDP) (10-4M) was added to homogenates with such a disturbed nucleotide balance, a normalization took place within 30 min, and the values of the initial physiol. equilibrium were restored. Due to the difference in the metabolic condition, there were differences between the behavior of the cortex homogenate and that of the nucleus. The original equilibrium of the free nucleotides present in homogenates of lens nuclei was more stable during incubation in the presence of glucose. Most obvious was the improvement of the equilibrium in the presence of FDP. Besides the anal. evaluation of the free nucleotides, the values of the concns. of dihydroxyacetone phosphate,

pyruvate, and lactate clearly showed that FDP may be utilized as a substrate for the glycolysis of lens homogenates. The in vitro penetration of FDP from a Krebs-Ringer solution into the bovine lens was investigated. At a concentration of 10-2M FDP in the medium, the lenses showed a considerably increased FDP concentration after 3 h. In vivo investigations with rabbits showed that the content of FDP in the aqueous was significantly increased after a subconjunctival injection of a 10-1M FDP solution as well as after topical application with a 20% eye ointment. These findings may be of importance with respect to a possible activation of the carbohydrate metabolism of the lens in vitro and probably also in vivo.

L8 ANSWER 147 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1979:207044 BIOSIS
DOCUMENT NUMBER: PREV197968009548; BA68:9548
TITLE: THE 2 3 CYCLIC AMP 3 PHOSPHO HYDROLASE EC-3.1.4.16 IN NORMAL AND PSORIATIC EPIDERMIS.
AUTHOR(S): MEZEI M [Reprint author]; HOWELL D R S
CORPORATE SOURCE: COLL PHARM, DALHOUSIE UNIV, HALIFAX, NS B3H3J5, CAN
SOURCE: British Journal of Dermatology, (1979) Vol. 100, No. 2, pp. 157-160.
CODEN: BJDEAZ. ISSN: 0007-0963.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB The activity of the enzyme 2',3'-cyclic AMP 3'-phosphohydrolase [EC 3.1.4.16] is significantly greater in the involved psoriatic skin than in the uninvolved psoriatic skin or in skin samples taken from persons with clinically normal skin. Although the physiological function of this enzyme is not established, it is possible that besides being associated with myelin, it may also play a role in cell proliferation and maturation, probably at the membrane level.

L8 ANSWER 148 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1979:207045 BIOSIS
DOCUMENT NUMBER: PREV197968009549; BA68:9549
TITLE: STUDIES ON 2 3 CYCLIC AMP 3 PHOSPHO HYDROLASE EC-3.1.4.16 IN RABBIT SKIN.
AUTHOR(S): MEZEI M [Reprint author]; MEZEI C
CORPORATE SOURCE: COLL PHARM, DALHOUSIE UNIV, HALIFAX, NS B3H3J5, CAN
SOURCE: British Journal of Dermatology, (1979) Vol. 100, No. 2, pp. 153-156.
CODEN: BJDEAZ. ISSN: 0007-0963.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB 2',3'-Cyclic(c)AMP 3'-phosphohydrolase [EC 3.1.4.16], an enzyme which splits the 3'-phosphate bond of the 2',3'-cAMP, is primarily confined to nervous tissue. The physiological function of this enzyme is still unknown. This enzyme was active in various rabbit organs, i.e., liver, kidney, heart and skin, although to a much lesser extent than in brain and sciatic nerve. Evidence of this enzyme in the skin generated further studies to measure the enzyme activity in normal and diseased skin. Chemically induced (surfactant-treated) skin disorder was used as a model for this study. Topical application of Polysorbate 85 resulted in a 2-fold increase of the enzyme activity in rabbit skin. This enzyme may have a role in repair mechanisms, particularly in the regeneration of damaged membranes.

L8 ANSWER 149 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1979:260277 BIOSIS
DOCUMENT NUMBER: PREV197968062781; BA68:62781
TITLE: INHIBITION BY POLY UNSATURATED PHOSPHO LIPIDS OF EXPERIMENTAL ALLERGIC ENCEPHALO MYELITIS IN THE GUINEA-PIG.
AUTHOR(S): SIMON J [Reprint author]; CONTAG I; POELLINGER G
CORPORATE SOURCE: MAX-PLANCK-INST PSYCHIATR, KRAEPELINSTR 2, D-8000 MUNICH 40, W GER
SOURCE: Journal of the Neurological Sciences, (1979) Vol. 40, No. 2-3, pp. 113-122.
CODEN: JNSCAG. ISSN: 0022-510X.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

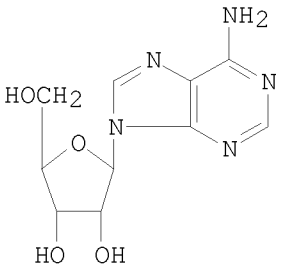
AB The effect of polyunsaturated phospholipids (Lipostabil) on the severity of experimental allergic encephalomyelitis (EAE) in guinea pigs was reported. A dose of 100 mg/kg of Lipostabil solution, containing about 50 mg of unsaturated fatty acids (UFA), was inoculated i.v. beginning on the 3rd day after sensitization with 100 μg of basic protein (BP) in complete Freund's adjuvant (CFA). A series of 7-14 daily injections completely inhibited EAE or reduced its severity. The production of anti-BP antibodies, detected by indirect immunofluorescence and radioimmunoassay, was not affected, whereas cellular reaction as measured by a skin test was markedly reduced. The immunoregulative effect of UFA was confirmed, even if a potentiating effect of additional components of Lipostabil (vitamin B6, nicotinic acid and AMP) cannot be excluded. The regulative effect probably mainly influences the cellular response. In this way deviation in the immune reaction leading to cellular immunopathology might be prevented or decreased.

L8 ANSWER 150 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 50

ACCESSION NUMBER: 1978:495014 CAPLUS
DOCUMENT NUMBER: 89:95014
ORIGINAL REFERENCE NO.: 89:14421a,14424a
TITLE: Pharmaceutical composition and process of treatment
INVENTOR(S): Voorhees, John J.
PATENT ASSIGNEE(S): University of Michigan, USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 12
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
US 4088756	A	19780509	US 1975-636037		19751128	<--
FR 2213778	B1	19780106	FR 1974-1338		19740115	<--
US 4107306	A	19780815	US 1977-808447		19770621	<--
US 4161525	A	19790717	US 1978-897063		19780417	<--
PRIORITY APPLN. INFO.:			US 1973-324012	A2	19730116	
			US 1973-425338	A2	19731217	
			US 1973-425065	A2	19731217	
			US 1976-643633	A3	19760105	
			US 1977-808447	A3	19770621	

OTHER SOURCE(S): MARPAT 89:95014
GI



I

AB Compns. containing an adenosine derivative and(or) papaverine, diazepam, etc., are useful for alleviating proliferative skin diseases such as psoriasis, atopic dermatitis, etc. The concentration of the active ingredients for topical administration ranges from .apprx.0.1 to 15%, and for parenteral treatment between 0.1-10%. Thus, 1000 tablets were prepared from adenosine (I) [58-61-7] 50, lactose 125, corn starch 65, Mg stearate 7.5 and light liquid petrolatum 3 g. The tablets were useful for systemic treatment of psoriasis.

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L8 ANSWER 151 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1978:235375 BIOSIS
DOCUMENT NUMBER: PREV197866047872; BA66:47872
TITLE: A DIFFERENT MODE OF ACTION OF POTASSIUM IONS AND VERATRIDINE ON THE FORMATION OF CYCLIC AMP IN THE CEREBRAL CORTEX.
AUTHOR(S): KRIVANEK J [Reprint author]
CORPORATE SOURCE: INST PHYSIOL, CZECH ACAD SCI, PRAGUE, CZECH
SOURCE: Neuroscience, (1978) Vol. 3, No. 3, pp. 333-338. CODEN: NRSCDN. ISSN: 0306-4522.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB The levels of cyclic[c]AMP were determined in the rat cerebral cortex after topical application of KCl or veratridine solutions of various concentrations. cAMP content was also measured in 100 μm frozen sections (1 mg wet wt) of the cortex invaded by slow potential change of spreading depression or on the surface of which 24% [wt/vol] KCl solutions were applied. Veratridine induced cAMP accumulation only in the concentrations eliciting spreading depression, whereas a roughly linear correlation between K concentration and cAMP levels was found. In the appropriate range of concentrations (threshold for eliciting spreading depression K) appeared to act in a similar way as veratridine, i.e., by triggering spreading depression. The difference between the ways by which K and veratridine cause an accumulation of cAMP suggest a dual effect of K ions. First, they may affect K+-sensitive elements in which formation of cAMP proceeds roughly linearly with increasing extracellular K+ concentration. Slight depolarization of these elements and/or their specific K+-receptors might activate the cAMP generating system. Second, K+ affects the cAMP in higher concentration in a similar way as veratridine, i.e., by triggering spreading depression.

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ACCESSION NUMBER: 1978300961 EMBASE
TITLE: Effects of the antidiuretic hormone, arginine vasotocin,

theophylline, filipin and A23187 on cyclic AMP in isolated frog skin epithelium (Rana temporaria).
AUTHOR: Johnsen, A.H.; Nielsen, R.
CORPORATE SOURCE: Inst. Biol. Chem. A, Univ. Copenhagen, Denmark.
SOURCE: Acta Physiologica Scandinavica, (1978) Vol. 102, No. 3, pp. 281-289.
ISSN: 0001-6772 CODEN: APSCAX
COUNTRY: Sweden
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 002 Physiology
003 Endocrinology
030 Clinical and Experimental Pharmacology
037 Drug Literature Index
LANGUAGE: English
AB A method for measuring cAMP in frog skin epithelium was developed. The epithelia were isolated after collagenase-treatment, cAMP was extracted by boiling water and the extract was purified on dry A12O3. The change with time of the cAMP level after addition of arginine vasotocin (AVT) was studied. The hormone caused a rapid increase in cAMP level with a maximum after 3-5 min, whereafter the cAMP level declined. Incubation with AVT made the epithelia refractory to a second dose of AVT, which indicates that the decline in cAMP level was caused by a feedback mechanism and not by inactivation of the hormone. cAMP appeared evenly distributed in all cell-layers of the epithelia both before and after stimulation with AVT. Theophylline caused a rapid increase in the cAMP level, which remained elevated for at least 45 min. Addition of the ionophore A23187 or of filipin had no effect on the cAMP level. However, in the presence of theophylline, A23187 enhanced the cAMP level, whereas filipin had no effect. Therefore the involvement of cAMP in the action of A23187 has to be considered.

L8 ANSWER 153 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 51
ACCESSION NUMBER: 1978:240003 BIOSIS
DOCUMENT NUMBER: PREV197866052500; BA66:52500
TITLE: CYCLIC AMP ACCUMULATION IN PSORIATIC SKIN DIFFERENTIAL RESPONSES TO HISTAMINE AMP AND EPINEPHRINE BY THE UNINVOLVED AND INVOLVED EPIDERMIS.
AUTHOR(S): IIZUKA H [Reprint author]; ADACHI K; HALPRIN K M; LEVINE V
CORPORATE SOURCE: VETERANS ADM HOSP, 1201 NW 16TH ST, MIAMI, FLA 33125, USA
SOURCE: Journal of Investigative Dermatology, (1978) Vol. 70, No. 5, pp. 250-253.
CODEN: JIDEAE. ISSN: 0022-202X.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB Using the uninvolved and involved skin from psoriatic patients, the effects of histamine and AMP (or adenosine) in vitro were investigated on the intracellular cyclic[c]AMP levels. Both agents activated adenylate cyclase of the uninvolved and involved skin, resulting in the accumulation of cAMP. Without a cyclic nucleotide phosphodiesterase (PDE) inhibitor, these responses were biphasic and the maximal accumulation was observed in 5 min. With the PDE inhibitor both responses were markedly potentiated and high levels of cAMP were observed for more than 20 min. The response to histamine by the involved skin was much greater than that by the uninvolved. The degree of the response to adenosine was approximately equal. In accordance with a previous study, the response to epinephrine by the involved skin was much less than that by the uninvolved. Thus, adenylate cyclases of involved skin from psoriatic patients exhibit a markedly diminished response to epinephrine while at the same time exhibiting a markedly enhanced response to histamine. This precludes the possibility that the unresponsiveness to

epinephrine can be due to a generalized inability of the epidermal psoriatic plaque cell to make a functioning cell membrane.

L8 ANSWER 154 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 52
ACCESSION NUMBER: 1978:236920 BIOSIS
DOCUMENT NUMBER: PREV197866049417; BA66:49417
TITLE: EXPERIMENTAL MODULATION OF 5 PHOSPHO RIBOSYL 1 PYRO PHOSPHATE AVAILABILITY FOR RIBO NUCLEOTIDE SYNTHESIS FROM HYPO XANTHINE IN HUMAN SKIN FIBROBLAST CULTURES.
AUTHOR(S): HOLLAND M J C [Reprint author]; KLEIN N C; COX R P
CORPORATE SOURCE: DIV HUM GENET, DEP MED PHARMACOL, NY UNIV MED CENT, NEW YORK, NY 10016, USA
SOURCE: Experimental Cell Research, (1978) Vol. 111, No. 2, pp. 237-244.
CODEN: ECREAL. ISSN: 0014-4827.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB The intracellular concentration of the cosubstrate 5-phosphoribosyl 1-pyrophosphate (PRPP) may be rate-limiting for the reactions, catalyzed by hypoxanthine phosphoribosyltransferase, by which mammalian cells convert the purine bases hypoxanthine, xanthine and guanine to their ribonucleotide derivatives. The rate of conversion of [14C]hypoxanthine to radioactive phosphorylated products by intact human diploid skin fibroblasts was measured in the presence of compounds previously reported to alter PRPP concentration in a variety of cell types. Methylene blue, previously reported to increase PRPP concentration in a variety of cultured cells including skin fibroblasts, increased product formation from hypoxanthine, with maximum effect following 60 min preincubation with 0.4 mM. Incubation with adenine, orotic acid, allopurinol or adenosine decreased PRPP concentration. Of these compounds, only adenine and adenosine decreased the rate of ribonucleotide synthesis from hypoxanthine in cultured skin fibroblasts. This decrease probably resulted from decreased PRPP synthesis rather than increased PRPP utilization. The reaction products isolated from cells following incubation with either [14C]adenine or [14C]adenosine included AMP and ADP, both inhibitors of PRPP synthetase.

L8 ANSWER 155 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1979:52157 CAPLUS
DOCUMENT NUMBER: 90:52157
ORIGINAL REFERENCE NO.: 90:8321a,8324a
TITLE: Comparative degradation of adenylnucleotides by cultured endothelial cells and fibroblasts
AUTHOR(S): Dosne, A. M.; Legrand, C.; Bauvois, B.; Bodevin, E.; Caen, J. P.
CORPORATE SOURCE: Lab. Hemostase Thrombose Exp., Hop. Saint-Louis, Paris, Fr.
SOURCE: Biochemical and Biophysical Research Communications (1978), 85(1), 183-9
CODEN: BBRCA9; ISSN: 0006-291X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The abilities of cultured human endothelial cells and skin fibroblasts to degrade adenine nucleotides were compared. The cells were incubated, either adherent in the culture dish or in suspension, for 5 min at 37° with 10-5M ATP-14C, ADP-14C, and AMP-14C and the metabolites in the supernatant were analyzed. Endothelial cells showed a much greater ability to degrade ATP and ADP, whereas fibroblasts were more efficient in degrading AMP. Due to the small amount of adenosine deaminase activity of endothelial cells, there was an accumulation of adenosine in the medium,

whereas fibroblast suspensions were able to convert a large part of adenosine to inosine. Nucleotide phosphorylation occurred mainly in suspensions of fibroblasts which converted ADP preferentially to ATP. A possible contribution of endothelial ADP degradation and of the subsequent adenosine accumulation in the endothelial cell inhibition of platelet aggregation is suggested. Differences in the enzymic activities exhibited by adherent and scraped cells were apparent. Adenine nucleotide degrdn fibroblast endothelium.

L8 ANSWER 156 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 53

ACCESSION NUMBER: 1978:162233 BIOSIS
DOCUMENT NUMBER: PREV197865049233; BA65:49233
TITLE: PROSTAGLANDIN CYTO PROTECTION OF GASTRIC MUCOSA.
AUTHOR(S): CHAUDHURY T K [Reprint author]; JACOBSON E D
CORPORATE SOURCE: OFF DEAN, COLL MED, UNIV CINCI, 231 BETHESDA AVE, CINCINNATI, OHIO 45267, USA
SOURCE: Gastroenterology, (1978) Vol. 74, No. 1, pp. 59-63.
CODEN: GASTAB. ISSN: 0016-5085.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Mechanisms by which prostaglandins [PG] protect gastric mucosa against erosive action of ulcerogenic drugs, such as indomethacin, is unknown. The hypothesis was tested that topical damaging agents inhibit active transport of Na+ in the gastric mucosa and that a cytoprotective PG will reverse this effect. Paired mucosal segments from the corpus of the dog stomach were mounted between bathing chambers to allow measurement of unidirectional 22Na fluxes, the electrical potential difference (PD) across the mucosa which is generated by active Na+ transport and the short-circuit current. The electrical resistance (R) was calculated from Ohm's law. The flux of 22Na from serosa to mucosa .**GRAPHIC**. is an index of the passive ion transport and is a measure of membrane permeability. The difference between the 2 unidirectional fluxes .**GRAPHIC**. represents the rate of active transport of the ion. If a topical damaging drug acted exclusively by increasing membrane permeability the following responses to the agent would be anticipated: increased .**GRAPHIC**. little effect on .**GRAPHIC**. decreased PD and decreased R. Adding indomethacin to the mucosal bathing solution in a concentration of 2.2 + 10-4 M caused no change in .**GRAPHIC**. decreases in .**GRAPHIC**. and PD and an increase in R. A primary effect on active Na+ transport is suggested. Effects of indomethacin on .**GRAPHIC**. PD and R were reversed by 16,16-dimethylprostaglandin E2 (8 + 10-7 M) and by agents known to increase intracellular cyclic[c]AMP content (theophylline and dibutyryl cAMP). Incubation of mucosae with the PG increased measured cAMP content 60% at a time before the full electrophysiological response. The active Na+ transport is probably inhibited by a damaging agent and is possibly stimulated by a protective agent, the latter appearing to act via increased accumulation of intracellular cAMP.

L8 ANSWER 157 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 1978:202753 BIOSIS
DOCUMENT NUMBER: PREV197866015250; BA66:15250
TITLE: HISTOCHEMICAL DIFFERENTIATION OF MICROFILARIAE OF DIPETALONEMA DIROFILARIA ONCHOCERCA AND SETARIA-SPP OF MAN AND DOMESTIC ANIMALS IN THE ZARIA AREA NIGERIA.
AUTHOR(S): SCHILLHORN VAN VEEN T W [Reprint author]; BLOTKAMP J
CORPORATE SOURCE: FAC VET MED, AHMADU BELLO UNIV, PMB 1045, ZARIA, NIGERIA
SOURCE: Tropenmedizin und Parasitologie, (1978) Vol. 29,

No. 1, pp. 33-35.
CODEN: TMPRAD. ISSN: 0303-4208.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB Histochemical staining with acid-phosphatase (ACP), and occasionally nicotinamide-dinucleotide-oxide reductase (NADH), leucine-aminopeptidase (AMP) and alkaline phosphatase (ALP) was carried out on microfilariae of man and animals from the Zaria area of Nigeria. Microfilariae of Dirofilaria repens, Dipetalonema spp., Onchocerca volvulus from skin snips, O. armillata, O. dukei, O. raillieti and Setaria spp. showed clear and distinct ACP activity. The method could be of use to distinguish different microfilariae within a host. The activity of NADH, AMP and ALP was low and seems of little use in differentiation. Neither O. volvulus microfilariae obtained from a nodule nor microfilariae from an unidentified canine Dipetalonema sp. showed any reaction with the 4 staining methods.

L8 ANSWER 158 OF 221 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN DUPLICATE 54
ACCESSION NUMBER: 0000192805 EMBASE
COPYRIGHT: MEDLINE® is the source for the citation and abstract of this record.
TITLE: Genital Herpesvirus homonis infection in mice. II. Treatment with phosphonoacetic acid, adenine arabinoside, and adenine arabinoside 5'-monophosphate..
AUTHOR: Kern, E.R. (correspondence); Richards, J.T.; Overall Jr., J.C.; Glasgow, L.A.
SOURCE: The Journal of infectious diseases, (Apr 1977) Vol. 135, No. 4, pp. 557-567.
ISSN: 0022-1899
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: MEDLINE
LANGUAGE: English
ENTRY DATE: Entered STN: Mar 2010
Last Updated on STN: Mar 2010
AB Genital infection of mice with Herpesvirus hominis type 2 provides an experimental model for screening potential antiviral chemotherapeutic agents before clinical trials in humans. Intravaginal treatment with phosphonoacetic acid (at a dose of 500 mg/kg in saline or as a 5% cream) initiated 3 hr after inoculation with H. hominis type 2 completely inhibited viral replication in the genital tract and prevented subsequent mortality. Although therapy initiated 24-72 hr after infection significantly reduced titers of virus in vaginal secretions from three- to 100-fold, most mice eventually died of encephalitis. Topical treatment with either adenine arabinoside or adenine arabinoside 5'-monophosphate at a dose of 500 mg/kg in saline or as a 10% cream failed to alter viral replication in the genital tract or to protect the mice from death due to encephalitis. Treatment by the intraperitoneal route with any of these three agents had no effect on local viral replication or final mortality.

L8 ANSWER 159 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 55
ACCESSION NUMBER: 1977:209561 BIOSIS
DOCUMENT NUMBER: PREV197764031925; BA64:31925
TITLE: SPECIFIC REFRACTORINESS OF ADENYLATE CYCLASE IN SKIN TO EPINEPHRINE PROSTAGLANDIN E HISTAMINE AND AMP.
AUTHOR(S): ADACHI K; IIZUKA H; HALPRIN K M; LEVINE V
SOURCE: Biochimica et Biophysica Acta, (1977) Vol. 497, No. 2, pp. 428-436.

CODEN: BBACAQ. ISSN: 0006-3002.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable
AB The cyclic[c]AMP level in pig skin (epidermis) increases markedly after incubation with epinephrine, prostaglandin E, histamine or AMP. This increase is transient, and spiking is the consistent response to these 4 stimulators. The spiking is due to a non-responsiveness or refractoriness which develops within minutes and is specific to any 1 stimulating hormone but not to the others. The addition of inhibitors of protein syntheses did not prevent the development of the refractoriness. Adenylate cyclase and phosphodiesterase activities measured in skin homogenates prepared from skin samples taken before, during and after the spiking did not change significantly. The hormone-induced refractoriness in this skin system appears to be due to a specific, localized loss of function of the adenylate cyclase system.

L8 ANSWER 160 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1978:211893 BIOSIS
DOCUMENT NUMBER: PREV197866024390; BA66:24390
TITLE: A COMPARISON OF BETA ADRENERGIC FUNCTION IN ASTHMA AND CHRONIC BRONCHITIS.
AUTHOR(S): JENNE J W [Reprint author]; CHICK T W; STRICKLAND R D; WALL F J
CORPORATE SOURCE: PULMON DIS SECT, VETERANS ADM HOSP, HINES, ILL 60148, USA
SOURCE: Journal of Allergy and Clinical Immunology, (1977) Vol. 60, No. 6, pp. 346-356.
CODEN: JACIBY. ISSN: 0091-6749.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB A β-adrenergic defect was postulated in asthma. β function in asthma was compared to that in chronic bronchitis. Using 5.0 mg terbutaline orally, the drop in diastolic blood pressure and eosinophils, rise in pulse, plasma lactate, blood sugar, plasma cyclic[c]AMP and free fatty acids, rise in urine cAMP/creatinine ratio and airway responses in a large number of obstructed bronchitics and stable extrinsic and intrinsic asthmatics, all middle-aged males were measured. The diagnosis of asthma required eosinophilia and airway variability and extrinsic asthma skin test reactivity. To avoid residual β tolerance, oral sympathomimetic agents were avoided 1-2 wk prior to testing. Fasting metabolic measurements were made at 0 and 180 min and changes in vascular and airway responses summated over 0, 60, 120 and 180 min. Although there was wide variation and group overlap, the extrinsic asthmatics had a very significant reduction of 75% in mean urine cAMP/creatinine ratio compared to chronic bronchitics. The bronchitics were marginally more responsive than a control group later judged to be defective. Other responses reflected this pattern to a lesser degree, but vascular responses were normal. Intrinsic asthmatics had intermediate but still significant β impairment. Asthmatics with excessive inhaler use (over 40 puffs/day or intermittent positive pressure breathing [IPPB] bronchodilator) had greater β impairment but also worse bronchoconstriction. β function of extrinsic asthmatics with minimal inhaler use was still impaired. When compared to chronic bronchitics, asthmatics have impairment of selected responses not including vascular smooth muscle relaxation. The β responses of chronic bronchitics are probably normal. The atopic state appears to be an independent trait but is superimposed on the β defect in extrinsic asthma.

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ACCESSION NUMBER: 1978118660 EMBASE
TITLE: Induction of melanogenesis in vitro in the epidermal melanoblasts of newborn mouse skin by MSH.
AUTHOR: Hirobe, T.; Takeuchi, T.
CORPORATE SOURCE: Biol. Inst., Tohoku Univ., Aoba yama, Sendai, Japan.
SOURCE: In Vitro, (1977) Vol. 13, No. 5, pp. 311-315.
ISSN: 0073-5655 CODEN: ITCSAF
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 013 Dermatology and Venereology
003 Endocrinology
037 Drug Literature Index
005 General Pathology and Pathological Anatomy
LANGUAGE: English
AB The number of epidermal melanocytes positive to the dopa reaction increased when skin explants from newborn mice were cultured with MSH or dbc-AMP. These agents seem to induce melanogenesis in the pre-existing melanoblasts. This hormone-induced melanogenesis is suppressed by actinomycin D or cycloheximide, suggesting that the initiation of melanogenesis in the epidermal melanoblasts requires de novo transcription and translation.

L8 ANSWER 162 OF 221 MEDLINE on STN
ACCESSION NUMBER: 1978018844 MEDLINE
DOCUMENT NUMBER: PubMed ID: 199118
TITLE: Synthesis of prostaglandins by psoriatic skin.
AUTHOR: Kassis V; Weismann K; Heiligstadt H; Sondergaard J
SOURCE: Archives for dermatological research. Archiv fur dermatologische Forschung, (1977 Sep 27) Vol. 259, No. 3, pp. 207-12.
Journal code: 7512589. ISSN: 0340-3696. L-ISSN: 0340-3696.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197711
ENTRY DATE: Entered STN: 14 Mar 1990
Last Updated on STN: 14 Mar 1990
Entered Medline: 30 Nov 1977
AB The biosynthesis of prostaglandins (PG) in biopsies from 9 patients with psoriasis was studied. The involved as well as the uninvolved psoriatic skin showed a statistically significant decrease of the ability to synthesize PG's. In PGE1-equivalents the concentration (mean +/- S.E.M.) was 4.41 +/- 0.48 ng/g wet weight in the psoriatic lesion, 5.41 +/- 0.64 ng/g wet weight in uninvolved psoriatic skin in the presence of exogenous arachidonic acid in the incubation medium as compared with 9.02 +/- 1.59 in normal human skin. When the skin was incubated without excess of exogenous precursor acid the activity formed was similarly significantly lower in psoriatic skin as compared with normal skin. A disturbed balance between E and F PG synthesis was not demonstrated, which might have accounted for the postulated altered intracellular ratio of cyclic AMP to cyclic GMP in psoriatic skin.

L8 ANSWER 163 OF 221 EMBASE DUPLICATE 57
ACCESSION NUMBER: 1978174067 EMBASE
TITLE: Epidermal adenylate cyclase systems: the retention of hormone responsiveness after enzymatic separation of pure epidermis.
AUTHOR: Uzuka, M.; Adachi, K.; Iizuka, H.; et. al.

CORPORATE SOURCE: VA Hosp., Miami, Fla., United States.
SOURCE: Journal of Investigative Dermatology, (1977) Vol. 69, No. 2, pp. 194-197.
ISSN: 0022-202X CODEN: JIDEAE
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 013 Dermatology and Venereology
029 Clinical and Experimental Biochemistry
003 Endocrinology
037 Drug Literature Index
LANGUAGE: English
AB Although it has been shown that keratome-sliced skin contains active adenylate cyclase systems which respond to various hormones and drugs, unequivocal proof that the epidermis contains these hormone responsive systems is still lacking. The authors demonstrate in this study that pure epidermis obtained after either collagenase or trypsin treatment does contain the hormone sensitive adenylate cyclase systems.

L8 ANSWER 164 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1977:241979 BIOSIS
DOCUMENT NUMBER: PREV197764064343; BA64:64343
TITLE: PHOSPHO DI ESTERASE INHIBITORS THEIR COMPARATIVE EFFECTIVENESS IN-VITRO IN VARIOUS ORGANS.
AUTHOR(S): ADACHI K; NUMANO F
SOURCE: Japanese Journal of Pharmacology, (1977) Vol. 27, No. 1, pp. 97-103.
CODEN: JJPAAZ. ISSN: 0021-5198.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable
AB The inhibitor constants of several inhibitors for cyclic[c]AMP- and cGMP-phosphodiesterase from various organs are compared. The inhibitors were classical theophylline, papaverine and some newly developed inhibitors: an imidazolidinone compound, RO20-1724 [4-(3-butoxy-4-methoxybenzyl)-2-imidazolidinone] and 2 phthalazinol compounds, EG 467 and EG 626. Among the inhibitors tested, papverine and EG 626 were the most potent. Both compounds were extremely inhibitory to platelet [human] and arterial [rat] phosphodiesterases. EG 626 was much more inhibitory to cAMP phosphodiesterase than to cGMP phosphodiesterase in platelet- and brain-extract [mouse] and RO20-1724 was inhibitory to cAMP- but not cGMP-phosphodiesterase in brain-extract. When the skin [mouse] adenyl cyclase was activated by AMP, the addition of theophylline blocked this activation, but EG 626 or EG 467 further potentiated the activation. These in vitro studies may serve as basic screening tests for the effectiveness of the specific phosphodiesterase inhibitors.

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ACCESSION NUMBER: 1978065937 EMBASE
TITLE: Herpes simplex keratitis: animal models to guide the selection and optimal delivery of antiviral chemotherapy.
AUTHOR: Falcon, M.G.; Jones, B.R.
CORPORATE SOURCE: Dept. Clin. Ophthalmol., Inst. Ophthalmol., Moorfields Eye Hosp., London, United Kingdom.
SOURCE: Journal of Antimicrobial Chemotherapy, (1977) Vol. 3, No. Sup. A, pp. 83-89.
ISSN: 0305-7453 CODEN: JACHDX
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 012 Ophthalmology
013 Dermatology and Venereology

030 Clinical and Experimental Pharmacology
037 Drug Literature Index
LANGUAGE: English
AB The requirements for fully effective antiviral chemotherapy of herpes simplex eye disease are described, and the status of currently available therapy is outlined. The principles of in vivo assessment of antivirals by measuring the corneal infectivity titre using the multiple microinoculation technique are described. This technique has been used to determine optimal schedules of topical administration of interferon for prophylaxis or therapy of viral eye disease. This led to the design of a clinical trial that has proved the beneficial effect of exogenous interferon in preventing recurrences or recrudescences of ulcerative herpetic keratitis. The method of measuring corneal infectivity titres has limitations, however, when very potent antivirals are used. These limitations have been overcome by the development of a Corneal Epithelial Lesion Reduction Assay (CELRA). It resembles a plaque reduction assay, and provides a means of measuring antiviral effect over a wide range of activity. The significance is discussed of results with adenine arabinoside, adenine arabinoside 5' monophosphate, and a deaminase inhibitor.

L8 ANSWER 166 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 58
ACCESSION NUMBER: 1977:12307 CAPLUS
DOCUMENT NUMBER: 86:12307
ORIGINAL REFERENCE NO.: 86:2011a,2014a
TITLE: Adenosine and adenine nucleotides stimulation of skin (epidermal) adenylate cyclase
AUTHOR(S): Iizuka, Hajime; Adachi, Keniji; Halprin, Kenneth M.; Levine, Victor
CORPORATE SOURCE: Dermatol. Serv., Miami VA Hosp., Miami, FL, USA
SOURCE: Biochimica et Biophysica Acta, General Subjects (1976), 444(3), 685-93
CODEN: BBGSB3; ISSN: 0304-4165
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Adenosine [58-61-7], AMP [61-19-8], ADP [58-64-0], and ATP [56-65-5] activated adenylate cyclase [9012-42-4] in pig skin (epidermis) slices, resulting in the accumulation of cyclic AMP [60-92-4]. This effect was highly potentiated by the addition of the cyclic AMP-phosphodiesterase [9036-21-9] inhibitor papaverine [9012-42-4], but another inhibitor, theophylline [58-55-9], strongly blocked the activation of adenylate cyclase by adenosine and adenine nucleotides. Theophylline apparently competed with adenosine for the cell surface receptor. Like theophylline, the addition of adenine [73-24-5] alone caused no accumulation of cyclic AMP, but it significantly inhibited the stimulatory effect of adenosine. Guanosine, the guanine nucleotides, CMP, TMP, UMP, 2'-adenylic acid, and 3'-adenylic acid had no effect on the accumulation of cyclic AMP. Adenosine 5'-monophosphoramidate [6154-31-0] significantly increased cyclic AMP, especially with the addition of papaverine. Together with previous reports, these results suggest that pig epidermis apparently has 4 specific and independent adenylate cyclase systems for adenosine (and adenine nucleotides), histamine [51-45-6], epinephrine [51-43-4], and prostaglandin E [11042-70-9].
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L8 ANSWER 167 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 59
ACCESSION NUMBER: 1976:209129 BIOSIS
DOCUMENT NUMBER: PREV197662039129; BA62:39129
TITLE: EFFECTS OF RESERPINE EPIDERMAL GROWTH FACTOR AND CYCLIC NUCLEOTIDE MODULATORS ON EPIDERMAL MITOSIS.

AUTHOR(S): BIRNBAUM J E; SAPP T M; MOORE J B JR
SOURCE: Journal of Investigative Dermatology, (1976) Vol. 66, No. 5, pp. 313-318.
CODEN: JIDEAE. ISSN: 0022-202X.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable
AB The mouse ear G2 stage of mitosis assay was modified for the screening of potential antimitotic agents. An inhibitory adrenergic influence, which maintains mitotic rate at a normally low level, was removed by pretreatment of mice with reserpine. This depletes endogenous catecholamines, produces a state of enhanced mitotic activity, and makes the epidermal cells particularly sensitive to mitotic inhibition by agents which elevate the levels of cyclic AMP. Isoproterenol [IC50, concentration producing 50% inhibition, .apprx. 1 + 10-9 M], prostaglandins, dibutyryl cyclic AMP [IC50 .apprx. 2 + 10-5 M], papaverine, theophylline and 5' AMP were inhibitory in the assay, whereas dibutyryl cyclic GMP and the cholinergic stimulator carbamylcholine either stimulated or had no effect on mitosis. Epidermal growth factor was employed as an alternate means of stimulating cell division. Skin from newborn mice or rats pretreated with this substance had increased epidermal mitotic activity which was inhibited by cyclic AMP elevators.

L8 ANSWER 168 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 60
ACCESSION NUMBER: 1976:403733 CAPLUS
DOCUMENT NUMBER: 85:3733
ORIGINAL REFERENCE NO.: 85:611a,614a
TITLE: Nucleic acid-reactive antibodies of restricted heterogeneity
AUTHOR(S): Cameron, Deborah J.; Erlanger, Bernard F.
CORPORATE SOURCE: Coll. Physicians Surg., Columbia Univ., New York, NY, USA
SOURCE: Immunochemistry (1976), 13(3), 263-9
CODEN: IMCHAZ; ISSN: 0019-2791
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Antibodies of the IgG-type and of restricted heterogeneity were isolated from 3 rabbits immunized with (AMP)2-gramicidin S. Antibody banding patterns were constant in 1 rabbit but varied after each boost in the other 2 rabbits. These antibodies, which reacted with DNA and RNA, were highly specific for AMP (Ka >106M-1) but could bind other ligands, suggesting antibody combining sites are multispecific. Crossreactivity of the antibodies with hydralazine (Kq >104M-1) may be relevant to the drug's induction of nucleic acid-reactive antibodies. Immunized rabbits displayed delayed hypersensitivity specific for adenine, indicating T-cell as well as B-cell interactions. A delayed skin reaction was also produced by gramicidin S.

L8 ANSWER 169 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1976:236952 BIOSIS
DOCUMENT NUMBER: PREV197662066952; BA62:66952
TITLE: EFFECTS OF DI BUTYRYL CYCLIC AMP ON HUMAN MELANOCYTES IN-VITRO.
AUTHOR(S): KITANO Y
SOURCE: Acta Dermato-Venereologica, (1976) Vol. 56, No. 3, pp. 223-228.
CODEN: ADVEA4. ISSN: 0001-5555.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable
AB The effects of cyclic AMP and its analogue, dibutyryl cyclic AMP (DBcAMP)

on the pigmentary system were studied by using human epidermal melanocytes in culture. The melanocytes responded to 1 mM DBcAMP with an increase in number, length and complexity of dendritic processes. The effect of DBcAMP on the dendritogenesis was reversible. Melanin synthesis, as indicated by the uptake of tyrosine in the presence of an inhibitor of protein synthesis, was significantly stimulated by DBcAMP. The maximum stimulation was observed at concentrations of 0.5 mM and 1.0 mM. The melanin synthesis increased after 12-h treatment with DBcAMP and continued to increase with the prolonged treatment. Cyclic AMP, theophylline, sodium butyrate or 5'-AMP at a concentration of 1 mM did not have any remarkable effect on the morphology or the melanin synthesis of the melanocyte. The results of this investigation indicate the possible role of the MSH [melanocyte stimulating hormone]-cyclic AMP system in the melanin pigmentation of human skin and represent a system for further study of the pathobiology of human melanocytes.

L8 ANSWER 170 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1976:213366 BIOSIS
DOCUMENT NUMBER: PREV197662043366; BA62:43366
TITLE: HISTAMINE RECEPTOR ADENYLATE CYCLASE SYSTEM IN PIG SKIN EPIDERMIS.
AUTHOR(S): IIZUKA H; ADACHI K; HALPRIN K M; LEVINE V
SOURCE: Biochimica et Biophysica Acta, (1976) Vol. 437, No. 1, pp. 150-157.
CODEN: BBACAQ. ISSN: 0006-3002.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable
AB Histamine activated adenylate cyclase in pig skin (epidermal) slices, resulting in the accumulation of cyclic AMP. This effect was highly potentiated by the addition of cyclic AMP-phosphodiesterase inhibitors (theophylline, papaverine). A specific H2 receptor inhibitor (metiamide) inhibited the effect of histamine completely, while other antihistamines (diphenhydramine, acetophenazine, perphenazine, fluphenazine and promethazine) inhibited the effect of histamine to various lesser degrees. Both epinephrine and prostaglandin E stimulate epidermal adenylate cyclase. Histamine, epinephrine and prostaglandin E2 act independently on the epidermal adenylate cyclase system.

L8 ANSWER 171 OF 221 MEDLINE on STN
ACCESSION NUMBER: 1977060032 MEDLINE
DOCUMENT NUMBER: PubMed ID: 186910
TITLE: Surface enzymes in cultured fibroblasts from cystic fibrosis patients.
AUTHOR: Ward J B Jr; Bowman B H
SOURCE: Texas reports on biology and medicine, (1976) Vol. 34, No. 1, pp. 83-96.
Journal code: 2984820R. ISSN: 0040-4675. L-ISSN: 0040-4675.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197701
ENTRY DATE: Entered STN: 13 Mar 1990
Last Updated on STN: 13 Mar 1990
Entered Medline: 29 Jan 1977
AB Membrane function was examined in cultured cells from cystic fibrosis patients by assaying several enzymes on intact skin fibroblasts attached to culture dishes. This technique required few cells and minimized disruption of cellular organization. Comparison of enzyme

activities of intact and broken cells showed that 12% of total glucose-6-phosphate dehydrogenase, a cytoplasmic enzyme, was measurable using intact cells, while all adenosine monophosphatase was measurable using intact cells. Alkaline paranitrophenylphosphatase activity was divided between the cell surface and interior. Substrate competition experiments indicated that substrate specificities for adenosine monophosphatase and paranitrophenylphosphatase activities were different. Adenosine monophosphatase activities of 2 control and 2 cystic fibrosis strains fluctuated similarly during the cell culture cycle. The apparent Km values relative to adenosine monophosphate were similar in all strains. A chromatographic fraction of serum from a cystic fibrosis patient that was inhibitory to oyster ciliary activity had no effect on adenosine monophosphatase activity of normal fibroblasts. Furthermore, fractions of media from cystic fibrosis homozygote and heterozygote fibroblast cultures were not inhibitory to adenosine monophosphatase activities of intact normal fibroblasts or of part iculate fractions prepared from them. In light of previous studies that showed that factors from cystic fibrosis serum of culture medium disrupted specific membrane activities, it is proposed that the cystic fibrosis factor interacts with the plasma membrane, interfering most conspicuously with the protein functions that are sensitive to changes in their membrane environment.

L8 ANSWER 172 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1976:227845 BIOSIS
DOCUMENT NUMBER: PREV197662057845; BA62:57845
TITLE: THERAPEUTIC EFFECT OF 5 HYDROXY TRYPTAMINE AMP AND ATP IN ACUTE RADIATION SYNDROME IN EXPERIMENTS.
AUTHOR(S): SHMIDT V; SHYUNTSEL G; BOLL'MAN G
SOURCE: Meditsinskaya Radiologiya, (1976) Vol. 21, No. 4, pp. 65-66.
CODEN: MERAA9. ISSN: 0025-8334.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable
AB A test of therapeutic compensation of irradiation-impaired formation of adenosine phosphates demonstrated that effect was proportional to a species-related ability of the test animals to synthesize these substances after irradiation. Rats, which despite lethal dosage maintained skin synthesis of 5-hydroxytryptamine, supporting in turn its physiological level in the blood, survived at the same rate with or without drugs. The survival rate of guinea pigs, in which irradiation reduced blood levels of 5-hydroxytryptamine, was sharply increased by the complex of 5-hydroxytryptamine plus ATP and AMP.

L8 ANSWER 173 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1978:167646 BIOSIS
DOCUMENT NUMBER: PREV197865054646; BA65:54646
TITLE: COMPARATIVE ANALYSIS OF THE EFFECT OF THEOPHYLLINE AND ALCOHOLS ON ION TRANSPORT IN FROG SKIN.
AUTHOR(S): NOVAK V A [Reprint author]; NOVIKOVA L K
CORPORATE SOURCE: RES INST BIOL BIOPHYS, VV KUIBYSHEV TOMSK UNIV, TOMSK, USSR
SOURCE: Biologicheskie Nauki (Moscow), (1976) Vol. 19, No. 10, pp. 26-30.
CODEN: BINKBT. ISSN: 0470-4606.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: RUSSIAN
AB Ion transport was analyzed in the skin of Rana ridibunda. Ion movements were measured by monitoring electrical short-circuiting. Actions of theophylline, ethanol and butanol were compared in active

transport of Na+ and passive transport of Cl- through the skin. Theophylline had direct alcohol-like effects on intercellular hydrophobic interactions in areas of intercellular contacts of the skin surface and induced transport of Cl- through extracellular canals. Theophylline can increase active transport of Na+ by altering levels of AMP.

L8 ANSWER 174 OF 221 EMBASE
ACCESSION NUMBER: 1976073793 EMBASE
TITLE: An analysis of the specificity in pharmacological inhibition of the passive cutaneous anaphylaxis reaction in mice and rats.
AUTHOR: Perper, R.J.; Oronsky, A.L.; Blancuzzi, V.
CORPORATE SOURCE: Res. Dept., Pharmaceut. Div., Ciba Geigy Corp., Ardsley, N.Y., United States.
SOURCE: Journal of Pharmacology and Experimental Therapeutics, (1975) Vol. 193, No. 2, pp. 594-602.
ISSN: 0022-3565 CODEN: JPETAB
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 030 Clinical and Experimental Pharmacology
037 Drug Literature Index
LANGUAGE: English
AB An antiserum obtained from mice, immunized to produce an antiovalbumin antibody of the IgE type, was employed in a 48 hr passive cutaneous anaphylaxis (PCA) reaction in both mice and rats. The antiserum contained an antibody which, 'fixed' to skin for at least 6 days, was heat labile and eluted from diethylaminoethyl cellulose in the reagin peak. In both rats and mice, the PCA reaction was mediated by a combination of histamine and serotonin and was inhibited by specific antagonists. Various drugs were tested for inhibition of the PCA reaction in recipients also injected with compound 48/80 and histamine. Drugs which have been reported to cause an increase in intracellular cyclic adenosine monophosphate levels [prostaglandins (PG) E1 and E2 and theophylline] all selectively inhibited the PCA reaction at low doses. By varying the length of time of drug administration prior to antigen challenge, the pharmacological half life of PGE1 was determined to be approximately 9 minutes. At high doses, theophylline also inhibited the 48/80 reaction, and PGE1 inhibited all three reactions, whereas PGE2 only inhibited PCA. Disodium cromoglycate, when given to rats, inhibited only the PCA reaction without effect on the 48/80 or histamine wheal. It was totally ineffective on any parameter measured in the mouse. It is suggested that the PCA reaction in the rodent is induced by an IgE like antibody and mediator release is, to some extent, sensitive to intracellular levels of cyclic adenosine monophosphate. Analysis of the specificity of drug activity depends upon dose response studies, species differences and consideration of nonspecific systemic effects.

L8 ANSWER 175 OF 221 MEDLINE on STN
ACCESSION NUMBER: 1976225018 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1228976
TITLE: Effects of exogenous ATP on short-circuit current and potential difference of the isolated frog skin.
AUTHOR: Walker L E; Norris W E Jr
SOURCE: Texas reports on biology and medicine, (1975) Vol. 33, No. 3, pp. 465-71.
Journal code: 2984820R. ISSN: 0040-4675. L-ISSN: 0040-4675.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
LANGUAGE: English
FILE SEGMENT: Priority Journals

ENTRY MONTH: 197609
ENTRY DATE: Entered STN: 13 Mar 1990
Last Updated on STN: 13 Mar 1990
Entered Medline: 1 Sep 1976

AB The addition of ATP (10(-3) M = final concentration) to the bathing medium of either side of the isolated frog skin resulted in parallel increases in potential difference and short-circuit current. Reductions in these electrical parameters induced by anaerobic conditions and sodium azide could be partially reversed by exogenous ATP. The response is apparently not mediated by cyclic adenylic acid, as it was not enhanced by theophylline. Ouabain failed to reduce rates of phosphate liberation induced by ATP, although potential difference and short-circuit current were reduced.

L8 ANSWER 176 OF 221 EMBASE DUPLICATE 61
ACCESSION NUMBER: 0000237964 EMBASE

TITLE: Cyclic 3',5'-nucleotide phosphodiesterase in rat skin. II. Biochemical characterization..
AUTHOR: King Jr., L.E.; Solomon, S.S.; Hasimoto, K.
SOURCE: The Journal of investigative dermatology, (Jun 1975) Vol. 64, No. 6, pp. 390-396.
ISSN: 0022-202X
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: MEDLINE
LANGUAGE: English
ENTRY DATE: Entered STN: Mar 2010
Last Updated on STN: Mar 2010

AB The biochemical characteristics of cyclic 3',5'-nucleotide phosphodiesterase were studied in homogenates of male albino rat skin using preparations which were predominantly epidermal. Enzymatic activity was detected in both the particulate and soluble fractions of these skin homogenates. Two kinetically distinct phosphodiesterase (PDE) activities were detected in the soluble fraction (100,000 times g supernatant). This 100,000 times g supernatant contains at least two distinct protein bands that hydrolyze cyclic AMP as demonstrated by gel electrophoresis. Divalent cations (Mg-++ or Mn-++) and 2-mercaptoethanol were required for maximal enzymatic activity. Epinephrine, dibutyryl cyclic AMP, and methylxanthines inhibited while imidazole and histamine phosphate stimulated the cyclic AMP phosphodiesterase activity at high and low cyclic AMP concentrations. Cyclic GMP competitively inhibited hydrolysis of low, but not high, concentrations of cyclic AMP. Hydrocortisone phosphate in pharmacologic concentrations blocked PDE denaturation by heat. These studies indicate that there are complex interrelationships between cyclic nucleotides and PDE in rat skin.

L8 ANSWER 177 OF 221 CAPLUS DUPLICATE 62
ACCESSION NUMBER: 1976:28846 CAPLUS
DOCUMENT NUMBER: 84:28846
ORIGINAL REFERENCE NO.: 84:4727a,4730a
TITLE: Deamination of biogenic amines and other nitrogenous compounds in granulation tissue from experimental wounds
AUTHOR(S): Romanova, L. A.; Stalnaya, I. D.; Gorkin, V. Z.
CORPORATE SOURCE: Inst. Biol., Moscow, USSR
SOURCE: Medical Biology (1975), 53(4), 205-9
CODEN: MDBYAS; ISSN: 0302-2137
DOCUMENT TYPE: Journal

LANGUAGE: English
AB In the granulation tissue of skin wounds an increase in the content of hydroxyproline was accompanied by changes in lipid peroxidn. products. At the same time deamination of 5-hydroxytryptamine, tyramine, or adenosine 5'-monophosphate decreased, but the ability to deaminate histamine, putrescine, and lysine appeared. Pargyline prevented the appearance of these new deaminating properties. Adenosine 3'-monophosphate slowed the weight increase and lowered the content of hydroxyproline in growing granulation tissue; it also changed the deamination of tyramine or 5-hydroxytryptamine and inhibited the deamination of histidine, lysine, and and adenosine 5'-monophosphate. The pattern of changes in deamination of nitrogenous compds. and the effects caused by pargyline and adenosine 3'-monophosphate suggested that qual. alteration (transformation) in catalytic properties of monoamine oxidases could occur in the growing granulation tissue from wounds.

L8 ANSWER 178 OF 221 MEDLINE on STN
ACCESSION NUMBER: 1975212428 MEDLINE
DOCUMENT NUMBER: PubMed ID: 239070
TITLE: Cyclic AMP and psoriasis.
AUTHOR: Halprin K M; Adachi K; Yoshikawa K; Levine V; Mui M M; Hsia S L
SOURCE: The Journal of investigative dermatology, (1975 Jul) Vol. 65, No. 1, pp. 170-8.
Journal code: 0426720. ISSN: 0022-202X. L-ISSN: 0022-202X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 197510
ENTRY DATE: Entered STN: 10 Mar 1990
Last Updated on STN: 6 Feb 1998
Entered Medline: 21 Oct 1975
AB Evidence that an adenyl cyclase system is present in all mammalian epidermis is reviewed. This adenyl cyclase is stimulated by at least two separate types of chemicals: catecholamines, which act at a beta-adrenergic receptor site, and prostaglandins of the E series, which act at a separate site. In the psoriatic lesion, the response to these stimulators, especially to the catecholamines, is reduced. Despite this lack of response to external agents which elevate cyclic AMP, the concentration of cyclic AMP within the epidermis of the psoriatic lesion is no lower than in noninvolved skin. How cyclic nucleotides act to control cell proliferation and cell differentiation remains unclear.

L8 ANSWER 179 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 63
ACCESSION NUMBER: 1975:471493 CAPLUS
DOCUMENT NUMBER: 83:71493
ORIGINAL REFERENCE NO.: 83:11165a,11168a
TITLE: Structure-activity profile of substituted purines and inflammation in the delayed hypersensitivity skin reaction
AUTHOR(S): Wojnar, R. J.; Losee, K. A.; Brittain, R. J.
CORPORATE SOURCE: Dep. Biochem. Pharmacol., Squibb Inst. Med. Res., Princeton, NJ, USA
SOURCE: Agents and Actions (1975), 5(2), 145-51
CODEN: AGACBH; ISSN: 0065-4299
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Substituted purines were tested for their effectiveness in inhibiting the

delayed hypersensitivity skin reaction (DHSR) caused by tuberculin in the guinea-pig. Among the tested purines were naturally occurring derivs. of guanine and adenine, including cyclic AMP Na salt [33116-15-3]. Based on the structure-activity profile, a class of purines was identified, the members of which were very effective inhibitors of inflammatory aspects of the DHSR and are characterized by a benzyl group in position 9, an amino or alkylamino group in position 6, and various substituents in position 2. This class of 2-substituted-9-benzyladenines (I) was more effective in the DHSR than some antimetabolites, particularly the structurally related mercaptopurines.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 180 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1975:471618 CAPLUS
DOCUMENT NUMBER: 83:71618
ORIGINAL REFERENCE NO.: 83:11193a,11196a
TITLE: In vitro analysis of the control of keratinocyte proliferation in human epidermis by physiologic and pharmacologic agents
AUTHOR(S): Flaxman, B. Allen; Harper, Robert A.
CORPORATE SOURCE: Sect. Med., Brown Univ., Providence, RI, USA
SOURCE: Journal of Investigative Dermatology (1975), 65(1), 53-60
CODEN: JIDEAE; ISSN: 0022-202X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Human keratinocytes grown in vitro as epithelial outgrowths or as organ cultures maintain many of their normal functions such as proliferation and keratinization. These in vitro systems have been used to analyze the effect of various agents on proliferation. All adenine nucleotides, including dibutyryl cyclic AMP (I) [362-74-3], blocked mitosis in the G2 part of the cell cycle at concns. of 1 + 10-4M. Some nonadenine nucleotides also showed this effect, but only at higher concns., an indication that the effect was specific for adenine nucleotides. I and theophylline [58-55-9] both depressed the incorporation of [3H]thymidine into DNA. Catechol amines such as DL-isoproterenol [149-53-1], epinephrine [51-43-4], and norepinephrine [51-41-2] were also potent inhibitors of mitosis (G2 block) at concns. of 1 + 10-8 to 1 + 10-10M. The fact that the effect could be blocked by the beta-blocking agent, propranolol [525-66-6], suggests the existence of specific membrane receptor sites. However, dichloroisoproterenol [59-61-0], another beta blocker, had distinct inhibitory properties in itself and thus indicated that the mechanism of action of catechol amines in human keratinocytes is complex and may involve more than binding to specific receptor sites. Histamine [51-45-6] at a concentration of 2 + 10-6M was also a strong mitotic inhibitor. This finding is directly opposed to that in rat skin where mitosis is stimulated. Imidazole acetate [645-65-8], a histamine breakdown product, was found to be a striking mitotic stimulator in organ culture. A water-extractable protein (chalone) from human skin also caused a block in G2. Most of the substances tested occur naturally in the cell or organism and their ability to stimulate or depress proliferation in vitro suggests that they play a regulatory role in vivo.

L8 ANSWER 181 OF 221 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1976115074 EMBASE
TITLE: Hydrolysis of adenylic acid by human skin tissue in vitro (Korean).
AUTHOR: Kahng, J.B.

CORPORATE SOURCE: Dept. Dermatol., Chonnam Univ. Med. Sch., Kwang-ju, Korea, Republic of.
SOURCE: Korean Journal of Dermatology, (1975) Vol. 13, No. 1, pp. 53-60.
ISSN: 0494-4739 CODEN: TPKCAW
DOCUMENT TYPE: Journal
FILE SEGMENT: 013 Dermatology and Venereology
029 Clinical and Experimental Biochemistry
005 General Pathology and Pathological Anatomy
LANGUAGE: Korean
AB The incubation of adenosine 5' monophosphate (AMP) with the homogenates of the epidermis and dermis, which were obtained from the axillary skin of osmidrosis (bromidrosis) patients, resulted in the formation of adenosine and inorganic phosphate (Pi) without further degradation, as demonstrated by paper chromatography. The conversion of AMP to adenosine in the skin was catalyzed by 5' nucleotidase and alkaline phosphatase. It was found that 5' nucleotidase was present both in tbe epidermis and dermis, being more active in the latter, and that the enzyme was responsible for more than 80% of the total AMP hydrolyzing activity present in the skin homogenates. Alkaline phosphatase was shown to be present mainly in the dermis, and its contribution to AMP hydrolysis was insignificant at pH 7.4. From these results, it is evident that AMP is converted to adenosine chiefly by 5' nucleotidase, which is present in the epidermis and dermis.

L8 ANSWER 182 OF 221 EMBASE
ACCESSION NUMBER: 1976136432 EMBASE
TITLE: In vitro analysis of the control of keratinocyte proliferation in human epidermis by physiologic and pharmacologic agents.
AUTHOR: Flaxman, B.A.; Harper, R.A.
CORPORATE SOURCE: Subsection Dermatol., Sect. Med., Brown Univ., Providence, R.I., United States.
SOURCE: Journal of Investigative Dermatology, (1975) Vol. 65, No. 1, pp. 52-59.
ISSN: 0022-202X CODEN: JIDEAE
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 013 Dermatology and Venereology
030 Clinical and Experimental Pharmacology
037 Drug Literature Index
LANGUAGE: English
AB Human keratinocytes grown in vitro as epithelial outgrowths or as organ cultures maintain many of their normal functions such as proliferation and keratinization. These in vitro systems have been used to analyze the effect of various agents on proliferation. All adenine nucleotides, including dibutyryl cyclic AMP, blocked mitosis in the G2 part of the cell cycle at concentrations of 1 x 10-4 M. Some nonadenine nucleotides also showed this effect, but only at higher concentrations, an indication that the effect was specific for adenine nucleotides. Dibutyryl cyclic AMP and theophylline both depressed the incorporation of [3H] thymidine into DNA. Catecholamines such as isoproterenol, epinephrine, and norepinephrine were also potent inhibitors of mitosis (G2 block) at concentrations of 1 x 10-8 to 1 x 10-10 M. The fact that the effect could be blocked by the beta blocking agent, propranolol, suggests the existence of specific membrane receptor sites. However, dichloroisoproterenol, another beta blocker, had distinct inhibitory properties in itself and thus indicated that the mechanism of action of catecholamines in human keratinocytes is complex and may involve more than binding to specific receptor sites. Histamine at a concentration of 2 x 10-6 M was also a strong mitotic inhibitor. This finding is directly opposed to that in rat skin where mitosis is stimulated. Imidazole acetate, a histamine breakdown product,

was found to be a striking mitotic stimulator in organ culture. A water extractable protein (chalone) from human skin also caused a block in G2. Most of the substances tested occur naturally in the cell or organism and their ability to stimulate or depress proliferation in vitro suggests that they play a regulatory role in vivo.

L8 ANSWER 183 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 64
ACCESSION NUMBER: 1975:12025 CAPLUS
DOCUMENT NUMBER: 82:12025
ORIGINAL REFERENCE NO.: 82:1909a,1912a
TITLE: Enhancement of 7,12-dimethylbenzanthracene skin carcinogenesis by adenosine 3',5'-cyclic monophosphate
AUTHOR(S): Curtis, Gary L.; Stenback, Frej; Ryan, Wayne L.
CORPORATE SOURCE: Med. Cent., Univ. Nebraska, Omaha, NE, USA
SOURCE: Cancer Research (1974), 34(9), 2192-5
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB The i.p. administration of adenosine 3',5'-cyclic monophosphate [60-92-4] increased the incidence of skin papillomas and squamous cell carcinomas induced by topical application of 7,12-dimethylbenzanthracene (I) [57-97-6]in mice, whereas AMP [61-19-8] had no effect.

L8 ANSWER 184 OF 221 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1975085271 EMBASE
TITLE: Release of histamine from human skin induced by intracutaneous injection of adenosine 5' triphosphate.
AUTHOR: Hagermark, O.; Diamant, B.; Dahlquist, R.
CORPORATE SOURCE: Dept. Dermatol., Karolinska Sjukh., Stockholm, Sweden.
SOURCE: International Archives of Allergy and Applied Immunology, (1974) Vol. 47, No. 2, pp. 167-174.
ISSN: 0020-5915 CODEN: IAAAAM
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 013 Dermatology and Venereology
026 Immunology, Serology and Transplantation
030 Clinical and Experimental Pharmacology
037 Drug Literature Index
LANGUAGE: English
AB A method of indirect determination of histamine release from human cutaneous mast cells is described. The histamine releasing effect of compound 48/80, ATP, ADP, and AMP in human skin was studied. Particular interest was devoted to ATP, previously shown to cause histamine release from rat mast cells in vitro. Intracutaneously injected ATP released histamine in concentrations >1 mg/ml. 48/80 stimulated histamine release in skin in concentrations >1 mg/ml. As compared with ATP, ADP had markedly weaker releasing effect and AMP did not induce histamine release within the concentrations investigated. No differences were observed in the releasing effects of ATP in various dermatoses such as chronic urticaria, atopic dermatitis, and psoriasis. However, in the few patients studied with acute urticaria, the ATP induced release was very low, probably due to previous depletion of the local histamine stores.

L8 ANSWER 185 OF 221 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1975023201 EMBASE
TITLE: The mechanism of frog skin lightening by acetylcholine.
AUTHOR: Moellmann, G.; Lerner, A.B.; Hendee Jr, J.R.
CORPORATE SOURCE: Dept. Dermatol., Yale Univ. Sch. Med., New Haven, Conn.

06510, United States.
SOURCE: General and Comparative Endocrinology, (1974) Vol. 23, No. 1, pp. 45-51.
ISSN: 0016-6480 CODEN: GCENA5
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical and Experimental Biochemistry
003 Endocrinology
030 Clinical and Experimental Pharmacology
037 Drug Literature Index
LANGUAGE: English
AB Darkening of frog skin by melanocyte stimulating hormone (MSH) is accompanied by an increase in adenosine 3',5' cyclic monophosphate (cyclic AMP). Among agents that lighten frog skin, norepinephrine and melatonin have been shown to diminish the MSH induced increase in cyclic AMP. To characterize the mode of action of acetylcholine (AcCh) as a lightening agent of frog skin melanocytes, AcCh responsive skins of Rana pipiens were darkened in vitro with MSH, lightened with AcCh in MSH solution, rinsed in MSH and then exposed to one of the following: dibutyryl cyclic AMP (DBcAMP); 5' AMP, ATP, theophylline, or caffeine. As a permutation, theophylline was added before or directly after MSH. The lightening of frog skin by AcCh was reversed by all agents except 5' AMP and was prevented by theophylline. In other experiments AcCh was added to skins darkened with MSH, theophylline, DBcAMP, ATP, epinephrine, or isoproterenol. AcCh reversed only darkening induced by MSH. It is suggested that in melanocytes of AcCh responsive frog skin, AcCh may bind to the MSH receptor, thereby preventing the MSH induced increase in cyclic AMP.

L8 ANSWER 186 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1973:453744 CAPLUS
DOCUMENT NUMBER: 79:53744
ORIGINAL REFERENCE NO.: 79:8679a,8682a
TITLE: Nucleotide-amino acid adducts
INVENTOR(S): Jacobi, Otto
PATENT ASSIGNEE(S): Kolmar Research Center G.m.b.H
SOURCE: Ger. Offen., 9 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2156556	A1	19730524	DE 1971-2156556	19711115 <--

PRIORITY APPLN. INFO.: DE 1971-2156556 19711115
AB Twenty addition compds. of nucleotides and amino carboxylic acids or amino sulfo carboxylic acids, useful as light stabilizers, e.g. for cosmetics, were prepared Thus, addition of 1 mole UMP in H2O to 2 moles 4-H2NC6H4CO2H in Me2CO, dissolving the precipitate in NaOH, and drying gave
1:2 UMP-Na 4-aminobenzoate adduct. Reaction of Na GDP in H2O with an aqueous solution containing K 3-amino-2-naphthoate and di-NH4 5-amino-3-sulfosalicylate gave Na GDP-(K 3-amino-2-naphthoate)-(diammonium 5-amino-3-sulfosalicylate) adduct.

L8 ANSWER 187 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1974:80731 CAPLUS
DOCUMENT NUMBER: 80:80731
ORIGINAL REFERENCE NO.: 80:12987a,12990a
TITLE: Contents of adenylic system components and the

intensity of phosphorus-32-labeled sodium orthophosphate incorporation into adenylic nucleotides of the liver and the skeletal muscle at various stages of burn disease
AUTHOR(S): Val'dman, B. M.; Stobodin, V. B.; Lifshits, R. I.
CORPORATE SOURCE: Chelyabinsk. Med. Inst., Chelyabinsk, USSR
SOURCE: Patologicheskaya Fiziologiya i Eksperimental'naya Terapiya (1973), (5), 58-62
CODEN: PAFEAY; ISSN: 0031-2991
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Exptl. burns were induced in rats by treating the epilated skin with EtOH. Animals were administered 32P-labeled phosphate 3-24 days after burning of 30-40% of the body surface, sacrificed after one hr, and the liver and skeletal muscles homogenized in cold trichloroacetic acid. Nucleotides were separated by high-voltage paper electrophoresis. Total nucleotides in the liver increased in exptl. animals while those in the muscle remained unchanged. In the liver there was a decrease of ATP from 3.23 μmoles/g of tissue to 2.00 μmoles during the first 3 days. In the same period ADP increased from 1.19 to 2.38 μmoles/g and AMP from 1.43 to 1.79 μmoles/g of tissue. Similar changes were also found in the skeletal muscle. The specific radioactivity of all three nucleotides was increased when compared with control animals.

L8 ANSWER 188 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1973:88529 CAPLUS
DOCUMENT NUMBER: 78:88529
ORIGINAL REFERENCE NO.: 78:14111a,14114a
TITLE: Cosmetics for skin
INVENTOR(S): Makabe, Osamu; Kanemitsu, Akio
PATENT ASSIGNEE(S): Kyowa Fermentation Industry Co., Ltd.
SOURCE: Jpn. Tokkyo Koho, 4 pp.
CODEN: JAXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 47026687	B4	19720718	JP 1966-66446	19661011 <--

AB Addition of adenosine mono- or diphosphate, guanosine mono-, di-, or triphosphate, inosinic acid or other related derivs. of purine produced improved cosmetic texture and preservation.
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L8 ANSWER 189 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 65
ACCESSION NUMBER: 1972:122414 CAPLUS
DOCUMENT NUMBER: 76:122414
ORIGINAL REFERENCE NO.: 76:19801a,19804a
TITLE: Acute inflammation induced by inorganic pyrophosphate and adenosine triphosphate, and its inhibition by cyclic 3',5'-adenosine monophosphate
AUTHOR(S): Ichikawa, Atsushi; Hayashi, Hideya; Minami, Machiko; Tomita, Kenkichi
CORPORATE SOURCE: Fac. Pharm. Sci., Kyoto Univ., Kyoto, Japan
SOURCE: Biochemical Pharmacology (1972), 21(3), 317-31
CODEN: BCPCA6; ISSN: 0006-2952
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Inorg. pyrophosphate [2466-09-3] given s.c. to rats caused inflammatory lesions on the skin, and the animals showed acute pain reactions at the time of administration. Pyrophosphate also increased vascular permeability and cutaneous histamine (I) [51-45-6]. ATP [56-65-5] showed similar and more potent effects on changes in vascular permeability and cutaneous I without causing acute pain reactions. Both the vascular response and I release elicited by pyrophosphate were inhibited by simultaneous administration of epinephrine [51-43-4], methylxanthines, or cyclic AMP [60-92-4]. Cyclic AMP inhibited both effects induced by ATP, while 5'-AMP suppressed only cutaneous I increase. Pyrophosphate released I from isolated mast cells but not from leukocytes. Mast cell I release induced by pyrophosphate, ATP, or compound 48/80 [4091-50-3] was also inhibited by cyclic AMP and 5'-AMP.

L8 ANSWER 190 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1973:52709 CAPLUS
DOCUMENT NUMBER: 78:52709
ORIGINAL REFERENCE NO.: 78:8292h,8293a
TITLE: Cyclic-AMP in the aqueous humor. Effects of adrenergic agents
AUTHOR(S): Neufeld, Arthur H.; Jampol, Lee M.; Sears, Marvin L.
CORPORATE SOURCE: Sch. Med., Yale Univ., New Haven, CT, USA
SOURCE: Experimental Eye Research (1972), 14(3), 242-50
CODEN: EXERA6; ISSN: 0014-4835
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The topical application of 1% l-epinephrine (I) [51-43-4], 1% l-norepinephrine [51-41-2], or 2% l-isoproterenol [51-31-0] to the rabbit eye decreased the intraocular pressure and increased cyclic AMP (II) [60-92-4] concentration, with the potency for both effects decreasing in the order cited. Both effects peaked at approx. 1.5 hrs and lasted 5 hrs. Phenoxybenzamine [59-96-1] (30 mg/kg, i.v.) blocked both effects, but propranolol [525-66-6] (5 mg/kg, i.v.) and topically applied aminophylline [317-34-0], theophylline [58-55-9], and dibutyryl cyclic AMP [362-74-3] were ineffective. The time coarse of epinephrine-induced mydriasis did not correlate with the courses of pressure and cyclic AMP concentration, resp. Injection of cyclic AMP into the aqueous humor (Estimated final concentration 4 .tim.
10-4M) decreased the intraocular pressure, but AMP [61-19-8] was ineffective. Cyclic AMP plays a central role in mediating the action of catechol amines on aqueous humor dynamics. The increase in aqueous humor and possible sites of AMP production and action are discussed.
OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L8 ANSWER 191 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1972:499218 CAPLUS
DOCUMENT NUMBER: 77:99218
ORIGINAL REFERENCE NO.: 77:16364h,16365a
TITLE: Adaptations to hypoxia in hibernating rodents
AUTHOR(S): Burlington, Roy F.; Vogel, James A.; Whitten, Bertwell K.
CORPORATE SOURCE: Dep.Biol., Cent. Michigan Univ., Mt. Pleasant, MI, USA
SOURCE: Environmental Physiology (1972), 2(1), 169-73
CODEN: EVPHBI; ISSN: 0300-547X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In hypoxia, AMP, ATP and creatine phosphate decreased when compared against controls. Followed by exposure to a 95 O-5% CO2 mixture, there was a gradual return to normalcy. Phosphofructose kinase, an antagonist to

ATP, was greatly increased. In in vivo expts. on woodchuck exposed to hypoxia, cardiac output, heart rate, stroke volume, and O and CO2 tension decreased. Also decreased in hypoxia was regional blood flow in hind leg and abdominal muscles, in heart, intestine, spleen, skin, and in auxiliary brown fat, but not in white fat. Hb. saturation decreased from 92.9 in controls to 61.2% after 30 min hypoxia. Since the ATP production, through glycolysis, could not account for maintenance in hypoxia, other routes for transformation of energy must be involved, thereby demonstrating an adaptation of hibernating animals to hypoxia. Excised hearts from mature rats and squirrels were perfused with Krebs-Ringer solution, stimulated by Pt. electrodes to 375-85 beats/min for 30 min, and equilibrated with a mixture of 95 N and 5% CO2. Samples were taken after 0.5, 1, 2, 5, and 10 min, frozen, and analyzed for adenine nucleotides. In in vivo expts. woodchucks were prepared and provided with catheters into the carotid artery and jugular vein and exposed to a mixture of 8.0% O in N, and arterial and venous blood samples were taken for anal.

L8 ANSWER 192 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1970:422575 CAPLUS
DOCUMENT NUMBER: 73:22575
ORIGINAL REFERENCE NO.: 73:3741a,3744a
TITLE: Polynucleotides active as inducers of interferon production in living animal cells
INVENTOR(S): Field, Arthur K.; Tytell, Alfred A.; Lampson, George P.; Hilleman, Maurice R.
PATENT ASSIGNEE(S): Merck and Co., Inc.
SOURCE: S. African, 67 pp.
CODEN: SFXXAB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
ZA 6707677	A	19690623	ZA 1967-7677		19671111 <--
DE 1617659	B2	19810521	DE 1967-M76681		19671221 <--
DE 1617659	C3	19820121			
NL 159282	B	19790215	NL 1967-17585		19671222 <--
US 4124702	A	19781107	US 1976-750499		19761214 <--
PRIORITY APPLN. INFO.:			US 1966-604137	A	19661223
			US 1967-641119	A	19670525
			US 1967-659308	A	19671009
			US 1967-684936	A	19671122
			US 1971-160188	A	19710706

AB Interferons are proteins of relatively low mol. weight which are produced by cells. This production is stimulated by viruses, certain other microbial agents, and by several substances of various origin. The interferons impart resistance to viral infection in uninfected cells for prolonged periods of time when given prior to virus. They are broad-spectrum with respect to virus species but are relatively host species-specific. Multistranded polynucleotides and sep. RNAs have exceptional properties as interferon inducers, but they must possess a high degree of purity and multistrandedness. Four representative sources of multistranded RNA are: (1) a complex of synthetic polynucleotides, (2) a RNA produced by mixing an extract of Penicillium funiculosum with phenol to obtain a release of the interferon inducing RNA which is then recovered in a highly purified form, (3) a RNA obtained from reovirus type 3 virions, and (4) a replicative form of RNA obtained by infecting living cells with a RNA virus. These sources of the multistranded RNA, its recovery, and use are described in detail. For example, the multistranded RNA may be prepared from a complex of synthetic polynucleotides as follows: a solution of polyinosinic acid (I)

is prepared which contains 550 μg/ml in 0.01M glycylglycine-0.1M NaCl. A solution of polycytidylic acid (II) is prepared containing 500 μg/ml in the same buffer. The 2 solns. are mixed to give a mole ratio of 1:1 with respect to bases, and the resulting solution is used directly as the source of the complexed polymers (Poly I:II). The complexed polymers formed in vitro can be characterized by a hypochromic shift in the uv absorption spectrum, sucrose d. gradient fractionation, chromatog., and the capacity to induce the production of interferon, an activity which is lacking in either of the polynucleotides from which the complex is formed. The induction of interferon formation in vivo is achieved by administration of the complexed polymer, parenterally or superficially to a mucous membrane (i.e. intranasal), to a rabbit, mouse, or other animal. In rabbits the threshold dose is .apprx.0.05 μg/kg and in mice 0.5 mg/kg. At these levels there are no signs of toxicity either locally or generally. Blood samples are taken after 1-5 hr, the serum separated, sterilized, and titrated at several dilns. in culture tubes containing cells from the same animal species as that used for the host. After incubation at 35° for 18-24 hr, the cell cultures are challenged with 1 of the known cytopathic viruses and again incubated at 35° for 3 days. The interferon titer is determined as the reciprocal of the dilution at which 50% of the tubes show no cytopathic effects. The induced interferon can be isolated by chromatog. on CM-Sephadex and characterized by host specificity, trypsin sensitivity, isoelec. point, and mol. weight determination The isoelec. point of rabbit interferon induced by Poly I:II is 6.8-6.9 and the mol. weight 49,000-52,000. The polynucleotides can be used as an inducer for interferon production, either in vivo or in vitro. Their principal use is injection into an animal or a person so that interferon is produced in vivo in large amount, thus protecting the host against infection by a variety of viruses. For instance, as a prophylactic intranasal preparation against respiratory viruses such as the common cold, a dose of 1-100 mg of Poly I:II could be applied to the nasal and oral membranes every 2 or 3 days in an aqueous suspension in an aspirator spray so that 1 or 2 sprays would deliver 5-10 mg. The period of administration is due to the prolonged duration of the induced interferon. For prophylactic and therapeutic use in the eyes, a conventional eye drop preparation such as a sterile peanut oil is made up so that a single drop contains 1-100 mg of Poly I:II to be applied to the eye every 2-3 days. Therapeutic activity could benefit an eye infected with herpesvirus, adenovirus, vaccinia virus, and trachoma [Chlamydia trachomatis]. Cutaneous prepns. for abraded skin or sterile solns. for parenteral administration could also be prepared

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L8 ANSWER 193 OF 221 TOXCENTER COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1970:55144 TOXCENTER
COPYRIGHT: Copyright 2010 ACS
DOCUMENT NUMBER: CA07305022575A
TITLE: Polynucleotides active as inducers of interferon production in living animal cells
AUTHOR(S): Field, Arthur K.; Tytell, Alfred A.; Lampson, George P.; Hilleman, Maurice R.
CORPORATE SOURCE: ASSIGNEE: Merck and Co., Inc.
PATENT INFORMATION: ZA 677677 23 Jun 1969
SOURCE: (1969) S. African, 67 pp.
CODEN: SFXXAB.
DOCUMENT TYPE: Patent
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 1970:422575
LANGUAGE: English

ENTRY DATE: Entered STN: 16 Nov 2001
Last Updated on STN: 26 Oct 2004

AB Interferons are proteins of relatively low mol. weight which are produced by cells. This production is stimulated by viruses, certain other microbial agents, and by several substances of various origin. The interferons impart resistance to viral infection in uninfected cells for prolonged periods of time when given prior to virus. They are broad-spectrum with respect to virus species but are relatively host species-specific. Multistranded polynucleotides and sep. RNAs have exceptional properties as interferon inducers, but they must possess a high degree of purity and multistrandedness. Four representative sources of multistranded RNA are: (1) a complex of synthetic polynucleotides, (2) a RNA produced by mixing an extract of Penicillium funiculosum with phenol to obtain a release of the interferon inducing RNA which is then recovered in a highly purified form, (3) a RNA obtained from reovirus type 3 virions, and (4) a replicative form of RNA obtained by infecting living cells with a RNA virus. These sources of the multistranded RNA, its recovery, and use are described in detail. For example, the multistranded RNA may be prepared from a complex of synthetic polynucleotides as follows: a solution of polyinosinic acid (I) is prepared which contains 550 μg/ml in 0.01M glycylglycine-0.1M NaCl. A solution of polycytidylic acid (II) is prepared containing 500 μg/ml in the same buffer. The 2 solns. are mixed to give a mole ratio of 1:1 with respect to bases, and the resulting solution is used directly as the source of the complexed polymers (Poly I:II). The complexed polymers formed in vitro can be characterized by a hypochromic shift in the uv absorption spectrum, sucrose d. gradient fractionation, chromatog., and the capacity to induce the production of interferon, an activity which is lacking in either of the polynucleotides from which the complex is formed. The induction of interferon formation in vivo is achieved by administration of the complexed polymer, parenterally or superficially to a mucous membrane (i.e. intranasal), to a rabbit, mouse, or other animal. In rabbits the threshold dose is .apprx.0.05 μg/kg and in mice 0.5 mg/kg. At these levels there are no signs of toxicity either locally or generally. Blood samples are taken after 1-5 hr, the serum separated, sterilized, and titrated at several dilns. in culture tubes containing cells from the same animal species as that used for the host. After incubation at 35° for 18-24 hr, the cell cultures are challenged with 1 of the known cytopathic viruses and again incubated at 35° for 3 days. The interferon titer is determined as the reciprocal of the dilution at which 50% of the tubes show no cytopathic effects. The induced interferon can be isolated by chromatog. on CM-Sephadex and characterized by host specificity, trypsin sensitivity, isoelec. point, and mol. weight determination The isoelec. point of rabbit interferon induced by Poly I:II is 6.8-6.9 and the mol. weight 49,000-52,000. The polynucleotides can be used as an inducer for interferon production, either in vivo or in vitro. Their principal use is injection into an animal or a person so that interferon is produced in vivo in large amount, thus protecting the host against infection by a variety of viruses. For instance, as a prophylactic intranasal preparation against respiratory viruses such as the common cold, a dose of 1-100 mg of Poly I:II could be applied to the nasal and oral membranes every 2 or 3 days in an aqueous suspension in an aspirator spray so that 1 or 2 sprays would deliver 5-10 mg. The period of administration is due to the prolonged duration of the induced interferon. For prophylactic and therapeutic use in the eyes, a conventional eye drop preparation such as a sterile peanut oil is made up so that a single drop contains 1-100 mg of Poly I:II to be applied to the eye every 2-3 days. Therapeutic activity could benefit an eye infected with herpesvirus, adenovirus, vaccinia virus, and trachoma [Chlamydia trachomatis]. Cutaneous prepns. for abraded skin or sterile solns. for parenteral administration could also be prepared

L8 ANSWER 194 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1970:40226 CAPLUS
DOCUMENT NUMBER: 72:40226
ORIGINAL REFERENCE NO.: 72:7375a,7378a
TITLE: Effects of cyclic 3',5'-AMP and other adenine nucleotides on the melanophores of the lizard (Anolis carolinensis)
AUTHOR(S): Hadley, Mac E.; Goldman, Joel M.
CORPORATE SOURCE: Coll. of Pharm., Univ. of Arizona, Tucson, AZ, USA
SOURCE: British Journal of Pharmacology (1969), 37(3), 650-8
CODEN: BJPCBM; ISSN: 0007-1188
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cyclic 3',5'-AMP (I) darkens skins of the frog, Rana pipiens. This suggests that I may mediate the action of MSH on amphibian chromatophores. Since MSH also darkens skins of the lizard, Anolis carolinensis, the effects of I and other nucleotides on Anolis melanophores were investigated to determine whether I may be the intracellular mediator of hormone action on melanophores of another vertebrate class. I itself causes a rapid melanin granule aggregation within melanophores of Anolis. This response is somewhat nonspecific in that both 5'-ATP and 5'-A dP also lighten the skins by aggregating the melanin granules. Another nucleotide, 5'-AMP, darkens the skins by dispersing melanin granules. Cyclic 2',3'-AMP does not darken or lighten Anolis skins. The dibutyryl derivative of I, which is considered to be better able to penetrate membranes and resist degradation by a specific phosphodiesterase, maximally darkens Anolis skins, as does MSH. This darkening by the potent dibutyryl derivative of I suggests that I may be the intracellular mediator of melanin granule dispersion within Anolis melanophores leading to skin darkening. Other evidence supporting the first-messenger-second-messenger hypothesis for melanophore regulation is discussed. The differences in responses of Anolis melanophores to adenine nucleotides may relate to the ability of these agents to penetrate melanophore membranes; thus, the nucleotides could exert their effects either intracellularly or extracellularly on the plasma membrane.
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 195 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1968:85688 CAPLUS
DOCUMENT NUMBER: 68:85688
ORIGINAL REFERENCE NO.: 68:16487a,16490a
TITLE: Biochemical stigmata of epidermis reactivity. I. Behavior of acid-soluble, ultraviolet-absorbing compounds of guinea pig epidermis under the influence of autolysis, regeneration stimulation, cetane application, and methotrexate treatment
AUTHOR(S): Schwarz, Eberhard; Klaschka, F.
CORPORATE SOURCE: Rudolf Virchow-Krankenhaus, Berlin, Fed. Rep. Ger.
SOURCE: Hautarzt (1967), 18(12), 532-5
CODEN: HAUTAW; ISSN: 0017-8470
DOCUMENT TYPE: Journal
LANGUAGE: German
AB Changes in the amts. of acid-soluble, uv-absorbing material in guinea pig epidermis following stimulation by repeated shaving or with cetane (hexadecane) or methotrexate (2 mg./kg./day for 8 days or 6 weeks) were studied by column chromatog. on Dowex 50-X8 eluted with HCOONH4. Fractions Ia-c contained AMP, GMP, CMP, and UMP; Id/e, hypoxanthine and guanosine; IIa1, free guanine; IIa2, probably cytosine; IIa3, probably

cytidine; III, which contained more than half of the total uv-absorbing material, contained urocanic acid; and IV, free adenine. Under autolytic conditions (hydrolysis of skin in HClO4), uv-absorbing fractions decreased. Skin stimulation by shaving, as well as cetane application, decreased fractions Id/e, IIa2, and particularly III; fractions Ia-c and IV were not significantly affected. Fraction IIa1 was observed after both treatments but not in controls; fraction IIa3 was observed only after treatment with cetane. Methotrexate treatment for 8 days reduced fractions Id/e, IIa2, IV, and particularly Ia-c, produced IIa1, did not affect III, and did not produce IIa3. After methotrexate treatment for 6 weeks, fractions Ia-c and III were similar to control values, and IV, Id/e, and particularly IIa2 were reduced. The levels of IIa1 were the highest observed; no IIa3 was produced. Fraction III is related to keratohyalin formation in the keratotic process.

L8 ANSWER 196 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1967:22129 CAPLUS
DOCUMENT NUMBER: 66:22129
ORIGINAL REFERENCE NO.: 66:4239a,4242a
TITLE: Cosmetics containing nucleosides and nucleotides
PATENT ASSIGNEE(S): Laboratoires du Docteur Jacques Auclair
SOURCE: Fr., 2 pp.
CODEN: FRXXAK
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1440795		19660603	FR 1965-13945	19650421 <--
DE 1617590			DE	

AB Cosmetic compns. were prepared by addition of 0.002-0.2% of derivs. of adenine (adenosine, AMP, ADP, ATP) to standard skin lotions and creams.
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 197 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1967:9919 CAPLUS
DOCUMENT NUMBER: 66:9919
ORIGINAL REFERENCE NO.: 66:1887a,1890a
TITLE: Effect of nicotinic acid and adenosine monophosphate on skin and muscle blood flow of vascularly healthy persons and patients with peripheral blood flow disturbances
AUTHOR(S): Gottstein, U.; Felix, R.; Flad, H. D.; Sedlmeyer, I.
CORPORATE SOURCE: Med. Univ. Kiel, Kiel, Germany
SOURCE: Zeitschrift fuer Kreislaufforschung (1966), 55(10), 970-87
CODEN: ZEKRAW; ISSN: 0044-295X
DOCUMENT TYPE: Journal
LANGUAGE: German
AB Intravenous injections of Complamin (7-[3-[(2-hydroxyethyl)methylamino]-2-(hydroxypropyl]theophylline nicotinate) (300 mg.) or Niconacid (Na nicotinate) into subjects with intact blood vessels increased blood flow in the skin of the foot. In patients with peripheral occlusive disease, vasodilation occurred in only 50%; paradox reactions with a diminished skin blood flow were also observed. Blood flow in the calf muscle was either decreased or not influenced by the intravenous nicotinic acid injections. Intraarterial injections of Complamin (300 mg.) into healthy subjects

increased skin blood flow which was usually greater on the side of the injection than on the contralateral extremity. Intraarterial infusions of 600 mg. of Complamin (45 mg./min.) into healthy subjects also increased blood flow in the skin. Muscle blood flow remained constant or even decreased markedly. Local intramuscular injections of Complamin (1.5 mg.) or Niconacid (0.5 mg.) into healthy subjects were followed by a decrease of local muscle blood flow. AMP (20 mg.) injected intravenously into healthy subjects did not alter or transiently decrease muscle blood flow, probably due to a drop in blood pressure. Intraarterial injections of AMP (20 mg.) into healthy subjects led to nonsystemic changes of skin blood flow, whereas a pronounced increase in muscle blood flow of 1-2 min. duration was observed. Continuous intraarterial infusions of AMP (6 mg./min. for 10 min. into healthy subjects) produced a sustained increase of muscle blood flow with periodic fluctuations on a higher blood flow level. After local intramuscular injections of AMP (0.2 mg.) into healthy subjects, local muscle blood flow was increased for a short time. Nicotinic acid drugs should only be used in the treatment of vascular disturbances in the skin and not in the muscle. Treatment with long-term intraarterial infusions of AMP (6 mg./min.) may be indicated for patients with muscular pain at rest. 16 references.

L8 ANSWER 198 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1966:501736 CAPLUS
DOCUMENT NUMBER: 65:101736
ORIGINAL REFERENCE NO.: 65:19039e-g
TITLE: Pharmacological data on phyllokinin (bradykinylisoleucyltyrosine O-sulfate) and bradykinylisoleucyltyrosine
AUTHOR(S): Anastasi, A.; Bertaccini, G.; Erspamer, V.
CORPORATE SOURCE: Inst. Pharmacol., Univ., Parma, Italy
SOURCE: British Journal of Pharmacology and Chemotherapy (1966), 27(3), 479-85
CODEN: BJPCAL; ISSN: 0366-0826
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The skin of Phyllomedusa rohdei, a South American amphibian, contains several polypeptides active on plain muscle. One of them, phyllokinin, has been obtained in a pure form and its amino acid composition and sequence have been elucidated. Phyllokinin is bradykinylisoleucyltyrosine O-sulfate. In its pharmacological actions, phyllokinin greatly resembles bradykinin. On dog blood pressure, phyllokinin is more potent than bradykinin; on extravascular smooth muscles less potent. Upon trypsin digestion, phyllokinin is transformed into bradykinin. The actions of phyllokinin are displayed by the intact mol. of the polypeptide, and not by the bradykinin eventually liberated following splitting off of the C-terminal dipeptide. This has been definitely ascertained in the action of phyllokinin on dog blood pressure. Removing the O-sulfate from the mol. cf phyllokinin produces a considerable reduction of potency. In fact, bradykinylisoleucyltyrosine is less potent than phyllokinin on all examined test prepns.
OS.CITING REF COUNT: 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)

L8 ANSWER 199 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 66
ACCESSION NUMBER: 1965:52817 CAPLUS
DOCUMENT NUMBER: 62:52817
ORIGINAL REFERENCE NO.: 62:9388a-c
TITLE: Evidences of a photoreaction of the photosensitizing furocoumarins with DNA and the pyrimidine nucleosides and nucleotides
AUTHOR(S): Musajo, L.; Rodighiero, G.; Dall'Acqua, F.

CORPORATE SOURCE: Univ. Padova, Italy
SOURCE: Experientia (1965), 21(1), 24-6
CODEN: EXPEAM; ISSN: 0014-4754
DOCUMENT TYPE: Journal
LANGUAGE: English
AB cf. CA 62, 5591e. In a study of the modifications occurring in DNA and furocoumarin (I) solns. irradiated with uv light (3655 A.), an evident shift of the maximum from 450 to 400 mμ, with an increased fluorescent intensity, was observed spectrofluorimetrically following the irradiation of a mixture of DNA and psoralen (II), the most skin-active I. The fluorescence spectrum of II, irradiated alone, did not exhibit a similar change. Analogous modifications in the fluorescence spectra were also observed for solns. of DNA added with other skin-photosensitizing I, such as xanthotoxin, bergapten, 4'-methylpsoralen, and 4,4',8-trimethylpsoralen, but no modifications were observed after irradiating a solution of DNA in the presence of skin-inactive I, such as bergaptol, imperatorin, and isopimpinellin. On irradiating aqueous solns. containing one of the moieties occurring in DNA and RNA and II, and preparing the chromatogram of the resulting product, modifications in the fluorescence spectra were observed only with the nucleosides and nucleotides derived from a pyrimidine base (i.e., thymidylic, cytidylic, deoxycytidylic, and uridylic acids, and thymidine, cytidine, deoxycytidine, and uridine), the modifications being identical, in all cases, and similar to those observed for DNA. No modifications were observed with the nucleosides and nucleotides derived from a purine, nor with the simple purine or pyrimidine bases. A photoreaction occurred when a solution of DNA was irradiated in the presence of a skin-active I.
OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

L8 ANSWER 200 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1965:61473 CAPLUS
DOCUMENT NUMBER: 62:61473
ORIGINAL REFERENCE NO.: 62:10940a-b
TITLE: Autoradiographic investigation of the distribution dynamics in vivo of 14C-labeled AMP and 32P-labeled H3PO4
AUTHOR(S): Beau, G.; Talvard, J.
CORPORATE SOURCE: Centre European Rech., Mauvernay, Fr.
SOURCE: Therapie (1964), 19(4), 865-77
CODEN: THERAP; ISSN: 0040-5957
DOCUMENT TYPE: Journal
LANGUAGE: French
AB Mice were treated orally with 3 mg./kg. (1 mc.) AMP-14C, with or without addition of 50 mg./kg. H332PO4, followed 5-120 min. later by autoradiography of various tissues. The incorporation of H3322PO4 in brain and bones was enhanced by AMP. AMP-14C showed higher rates of incorporation in the presence than in the absence of H3PO4 in almost all the investigated tissues. The radioactivity of tissues 5 min. after the administration of H3PO4-AMP-14C was in the following order: Renal pelvis > intestine > liver > adrenals > blood > muscle > skin.

L8 ANSWER 201 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1964:77419 CAPLUS
DOCUMENT NUMBER: 60:77419
ORIGINAL REFERENCE NO.: 60:13644b-c
TITLE: Acid-soluble nucleotides and peptides of skin
AUTHOR(S): Urivetzky, Morton; Seifter, Sam; Meilman, Edward
CORPORATE SOURCE: Albert Einstein Coll. of Med., New York, NY
SOURCE: Proceedings of the Society for Experimental Biology and Medicine (1964), 115, 305-10
CODEN: PSEBAA; ISSN: 0037-9727

DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB A cold-HClO4 extract was made of the skins of young rabbits and separated into fractions by described methods. Small amts. of substances reacting with alkaline HONH2 solution were detected in some fractions. Two fractions subjected to paper electrophoresis contained overlapping nucleotide and peptide components migrating toward the cathode at pH 4 and giving pos. color tests for hydroxamates after treatment with HONH2 and ferric perchlorate spray reagents. Proline was present in these fractions and several others. An acidic peptide containing glutamic acid (N-terminal), glycine, and cysteic acid was isolated from a fraction adsorbed and eluted on and from Dowex-1 which also contained adenylic acid. Quant. anal. data on the composition of the many fractions are tabulated.

L8 ANSWER 202 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 67
ACCESSION NUMBER: 1965:75862 CAPLUS
DOCUMENT NUMBER: 62:75862
ORIGINAL REFERENCE NO.: 62:13470e-f
TITLE: Effect of ACTH, cortisone, and STH [somatotropin] on the vascular permeability and leukocyte emigration under adenine nucleotide action
AUTHOR(S): Lipshits, R. U.
CORPORATE SOURCE: Med. Inst., Kharkov
SOURCE: Problemy Endokrinologii i Gormonoterapii (1964), 10(5), 78-82
CODEN: PEGTAA; ISSN: 0032-9509
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB An attempt to evaluate an interaction of adenine nucleotides (enhancing the capillary permeability and migration of leukocytes) and the antiinflammatory agents ACTH and cortisone was carried out in rats and rabbits. Animals pretreated for 4-5 days with the hormones (rabbits 2.5-5 mg./kg. of cortisone or 2.5-5 I.U./kg. of ACTH, rats 1.2-2.5 mg. of cortisone) were given trypan blue intraperitoneally and ATP or adenylic acid intracutaneously. The deposits of the dye in the skin were then evaluated. In the ACTH- or cortisone-pretreated animals, the inflammatory effect of ATP and adenylic acid was diminished and delayed. The migration of leukocytes was inhibited by ACTH more than by cortisone. On the contrary, STH potentiated the effects of ATP. Interaction between these hormones and adenine nucleotides may be involved in the mechanism of their antiinflammatory action.

L8 ANSWER 203 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1963:464964 CAPLUS
DOCUMENT NUMBER: 59:64964
ORIGINAL REFERENCE NO.: 59:12028a-c
TITLE: Fate of purines liberated from nucleic acids during cellular breakdown in epidermal keratinization
AUTHOR(S): Schwarz, E.
CORPORATE SOURCE: Freie Univ., Berlin
SOURCE: Archiv fuer Klinische und Experimentelle Dermatologie (1963), 216(5), 427-45
CODEN: AKEDAX; ISSN: 0300-8614
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Isotopic purines (I) were employed as tracers to assess the fate of I during epidermal cornification. In incubation studies on the exposed stratum corneum conjunctum (SCC) of humans or guinea pigs, the eventual isolation of the extracted, H2O-soluble, labeled reaction products was effected by paper or columnar (resin-exchange) chromatography. In model expts. on the nonenzymic browning reaction, the possibility of I-ring destruction in the keratogenous zone was investigated. Quant. uric acid (II) analyses

were carried out on epilated skin and on the animal's hair; the browning reaction was carried out with heated ribose (III)-skin eluate mixts. Characterization of the mobile materials in the paper chromatographic procedure was effected by spraying the paper either with diazotized sulfanilic acid, or phosphotungstic acid. The I assayed were adenine-8-C14 (IV) and hypoxanthine-8-C14 (V). Oxidase activity was present in guinea pig but not in human epidermis; adenase activity was evident in human epidermis. In the presence of III and adenosine triphosphate, the synthesis of nucleotides indicated that there were enzymes present which catalyzed the synthesis of the intermediary 5-phospho-III-1-pyrophosphate and IV-monophosphate; the V did not appear to be associated with any specific enzymes. The browning reaction did not appear to be involved with I-ring destruction.

L8 ANSWER 204 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1964:420096 CAPLUS
DOCUMENT NUMBER: 61:20096
ORIGINAL REFERENCE NO.: 61:3463b-d
TITLE: Morphogenesis of the down feather in the presence of pyrimidines, a riboside, and related compounds
AUTHOR(S): Gibley, Charles William, Jr.
CORPORATE SOURCE: Iowa State Univ., Ames
SOURCE: American Journal of Anatomy (1963), 113(3), 389-405
CODEN: AJANA2; ISSN: 0002-9106
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Effects were determined of several analogs of pyrimidines and other inhibitors of the synthesis of ribonucleic acid (RNA) or proteins in tissue cultures of embryonic chick skin. Barbituric acid was only partially inhibitory at concns. as high as 833 γ/ml.; alkaline phosphatase (I) activity was still present, but its distribution was uneven. Dithiopyrimidine arrested growth at a concentration of 333 γ/ml. and lower levels were without significant effect. I was decreased. 4,5,6(or 5,6,7)-Trichloro-1- (β-D-ribofuranosyl)benzimidazole stopped growth at concns. of 41.6 and 83.3 γ/ml., resp. I was diffuse throughout the explant. The amount of RNA in the nucleus and cytoplasm was decreased. These effects were partially prevented by addition of adenosine. Puromycin stopped growth at concns. of 1.7-333 γ/ml.; activity of I was decreased. Adenylic acid partially prevented the effects of puromycin. 5-Bromouracil, 5-nitrouracil, diethylbarbituric acid, isoorotic acid, and 2,4,6-triaminopyrimidine had no appreciable effect.

L8 ANSWER 205 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 68
ACCESSION NUMBER: 1964:41199 CAPLUS
DOCUMENT NUMBER: 60:41199
ORIGINAL REFERENCE NO.: 60:7287g-h,7288a
TITLE: The effect of adenine nucleotides on vascular permeability
AUTHOR(S): Al'pern, D. O.; Lipshits, R. U.
CORPORATE SOURCE: Med. Inst. Kharkov
SOURCE: Cor et Vasa (1963), 5(1), 62-71
From: Biol. Abstr. 44(3), Abstr. No. 9804(1963).
CODEN: COVAAN; ISSN: 0010-8650
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. 54, 2554i. The effect of adenine nucleotides on vascular permeability, and on their role in the rise in permeability associated with inflammation is given. In 1 exptl. group of rabbits adenosine triphosphate (ATP) and adenylic acid increase the permeability of skin capillaries to trypan blue given intravenously. This rise was more marked in a second exptl. series of rats. Adenosine nucleotide

also increases skin capillary permeability. In comparison with adenylic acid, the effect of ATP and adenosine were greater. Further evidence for the role of these substances in inflammation is the fact that under such circumstances there is a rise in local tissue concentration A further effect of the same substances at the same site of application is a rise in leukocyte migration and perivascular infiltration; this occurs in addition to the rise in capillary permeability. The role of adenine nucleotides in raising capillary permeability must be understood in relation to the activity of other physiol. active compds. which are also products of tissue metabolism.

L8 ANSWER 206 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1962:10244 CAPLUS
DOCUMENT NUMBER: 56:10244
ORIGINAL REFERENCE NO.: 56:1925h-i
TITLE: Experimental porphyria provoked by hexachlorobenzene in white rats. Therapeutic action of adenosine monophosphate (AMP)
AUTHOR(S): Gajdos, A.; Gajdos-Torok, M.
CORPORATE SOURCE: Hop. Hotel-Dieu, Paris
SOURCE: Comptes Rendus des Seances de la Societe de Biologie et de Ses Filiales (1961), 155, 446-9
CODEN: CRSBAW; ISSN: 0037-9026
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Rats fed a stock ration with 0.2% of hexachlorobenzene added developed, in 2-4 weeks, severe porphyria characterized by skin lesions, nervous disorder, marked excretion and also accumulation in various organs of uroporphyrin, and fatty degeneration of the liver. Death from cachexia occurred in about 6 weeks. All these effects were greatly diminished but not abolished by daily subcutaneous injection of 10-20 mg. of AMP.

L8 ANSWER 207 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1961:77210 CAPLUS
DOCUMENT NUMBER: 55:77210
ORIGINAL REFERENCE NO.: 55:14664g-i
TITLE: Release of a pharmacologically active substance from rat skin in vivo following thermal injury
AUTHOR(S): Rocha e Silva, M.; Rosenthal, Sol Roy
CORPORATE SOURCE: Univ. of Illinois Med. Coll., Chicago
SOURCE: Journal of Pharmacology and Experimental Therapeutics (1961), 132, 110-16
CODEN: JPETAB; ISSN: 0022-3565
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB By use of suitable biol. assays (guinea pig ileum, rat uterus and duodenum, hen rectal cecum, and rat blood pressure) evidence was obtained that histamine, bradykinin, and adenosine and (or) adenylic acid appear in wash fluid from rat dorsal subcutaneous air pockets after immersion of the outer skin over the pocket in a water bath at 96° for 15 sec. Similar results were obtained when the air pocket was perfused and the skin was burned by a 250 w. infrared lamp.
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 208 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1961:14639 CAPLUS
DOCUMENT NUMBER: 55:14639
ORIGINAL REFERENCE NO.: 55:2909e-f
TITLE: Permeability changes by combinations of pharmaceuticals with potentiating characteristics

AUTHOR(S): Chemnitius, K. H.; Gympel, J.
CORPORATE SOURCE: Univ. Jena, Germany
SOURCE: Medizinische Monatsschrift (1960), 14, 299-301
CODEN: MEMOAQ; ISSN: 0025-8474
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Expts. with methylene blue solution were carried out on cellophane membranes, and polarization capacity was determined on the abdominal skin of rats and of frogs. Aminopyrine produced a reduction in tissue permeability. This effect was increased by the admixt. of chlorpromazine. Adenosine 5'-phosphate, neostigmine, benzylbutenolide, dihydroxypropyltheophylline, and guaiamar increased permeability markedly when added to aminopyrine. Reserpine had no definite influence. Vitamin K4 was most effective in increasing permeability.

L8 ANSWER 209 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1961:49981 CAPLUS
DOCUMENT NUMBER: 55:49981
ORIGINAL REFERENCE NO.: 55:9663a-c
TITLE: The effect of adenine nucleotides on the vascular permeability of rat skin
AUTHOR(S): Lipshits, R. U.
CORPORATE SOURCE: Inst. Med., Kharkov
SOURCE: Byulleten Eksperimental'noi Biologii i Meditsiny (1960), 49(No. 8), 67-70
CODEN: BEBMAE; ISSN: 0365-9615
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Trypan blue was given intravenously to rats and 3-4 min. after that 0.1 ml. of an adenosine triphosphate (I) (0.25-1 mg.) or adenylic acid (II) solution administered on depilated abdominal skin; 0.1 ml. of physiol. saline was given in control animals. After 10-15 min. a stained area was seen on the site of I or II administration. Vascular permeability was increased more by I than by II.

L8 ANSWER 210 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1960:57745 CAPLUS
DOCUMENT NUMBER: 54:57745
ORIGINAL REFERENCE NO.: 54:11258d-e
TITLE: The effect of adenosinetriphosphoric and adenylic acid on tissue regeneration and on its oxidation-reduction potential
AUTHOR(S): Palladina, L. I.; Gudina, A. M.
SOURCE: Vrachebnoe Delo (1959) 1053-6
CODEN: VRDEA5; ISSN: 0049-6804
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB In vivo and in vitro test have shown that adenosinetriphosphoric (I) and adenylic (II) acids accelerate the regeneration of scar tissue, cause more intense dehydrogenase activity and better O absorption by the regenerating tissue. In skin therapy these enter the system as biogenic stimulants of tissue metabolism and, thus, also of regenerative processes. I and II acids may be applied as 0.8% solns. on bandages or in 2 mg./ml. concentration in subcutaneous injection.

L8 ANSWER 211 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1958:11839 CAPLUS
DOCUMENT NUMBER: 52:11839
ORIGINAL REFERENCE NO.: 52:2172a-c
TITLE: Biosynthesis of carotenoids in Rhodotorula gracilis. VI. Inhibition of carotenoid formation by

diphenylamine
AUTHOR(S): Praus, Roman; Dyr, Josef
CORPORATE SOURCE: Tech. Univ., Prague
SOURCE: Chemicke Listy pro Vedu a Prumysl (1957), 51, 1939-43
CODEN: CLPRAN; ISSN: 0366-6832
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C.A. 51, 16728e. Diphenylamine (I) inhibits specifically in concns. above 4 + 10-5M the biosynthesis of colored carotenoids (II) by R. gracilis. With growing concentration of I the color of the yeast changes from coral-red over orange (at 8 + 10-5M) to skin-colored (at 1.6 + 10-4M). Within this concentration range I influences neither glucose consumption nor production of cellular matter and fat nor the iodine number The inhibition affects in the first place the formation of torulene and stops it entirely at concentration of I 8 + 10-5M, while the yeast produces the same amount of higher saturated carotenoid compds., notably phytotene (III), phytofluene (IV) besides α- and β-carotene. At concentration 1.6 + 10-4M I there proceeds only the synthesis of III and IV. Riboflavine counteracts the inhibitory effect of I by suppressing it entirely at 8 + 10-5M I and lowering it at 1.6 + 10-4M I. Adenylic acid has a similar but weaker effect. The inhibition is reversible since transferring I-treated yeast to a medium devoid of I restores the ability to synthesize II.

L8 ANSWER 212 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1960:111979 CAPLUS
DOCUMENT NUMBER: 54:111979
ORIGINAL REFERENCE NO.: 54:21420e-g
TITLE: Acute vasodilatation in the terminal circulation with adenosine monophosphoric acid
AUTHOR(S): Marx, H.; Schoop, W.
CORPORATE SOURCE: Med. Klinik Stadt. Darmstadt, Germany
SOURCE: Zeitschrift fuer Klinische Medizin (1879) (1956), 154, 293-301
CODEN: ZKMEAB; ISSN: 0372-9192
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. Wagenmann, et al., CA 49, 7738f. Effects of adenosine monophosphoric acid (AMP) were studied in 16 patients with vascular disease by measuring arterial, venous, and peripheral (integrated capillary) pressure and muscle blood flow. Intravenous injection of 2.5-10 mg. AMP rapidly increased the respiration rate, transiently raised diastolic and systolic blood pressures, and produced tachycardia as pressure fell below normal. Venous pressure and circulation in muscle increased. Intraarterial injection promptly increased flow in muscle and skin and elevated peripheral pressure. These reactions lasted only 1-2 min. More prolonged intravenous infusion at a rate of 4 mg./min. produced fluctuating changes in pressure and blood flow.

L8 ANSWER 213 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1955:49733 CAPLUS
DOCUMENT NUMBER: 49:49733
ORIGINAL REFERENCE NO.: 49:9706h-i,9707a-b
TITLE: The nature of active substances in the extracts of skin of cadavers. IV. The mechanism of action of biogenic stimulators
AUTHOR(S): Palladina, L. I.; Gudina, A. M.
SOURCE: Ukrains'kii Biokhimichnii Zhurnal (1946-1977) (1954), 26, 444-51;in Russian, 451-3
CODEN: UBZHAZ; ISSN: 0372-3909

DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C.A. 47, 12638b. NH4 ions activate the process of tissue growth and repair and enhance the process of glycolysis and oxidation in tissues. Preparation LP described in above reference and exts. of preserved skin of cadavers also stimulate glycolysis. The role played by NH4+ in the transfer of P from phosphopyruvic acid to the adenylic acid system was studied. Upon the addition of phosphoglyceric acid this phosphorylase reaction is accompanied by an increase in pyruvic acid and, owing to a rapid dephosphorylation of adenosinetriphosphoric acid, inorg. P accumulates. NH4+ enhanced the rate of P transfer as above described. The presence of (NH4)2CO3 increased the power of liver tissue to reduce methylene blue and its oxidative process. Other phases are described of the beneficial effect of biogens and NH4+ on the growth and repair processes of the body tissues. It is concluded that the role played by NH4+ and biogenic stimulators is inherent in the nature of their reactivity with metabolic processes of the organism.

L8 ANSWER 214 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1955:25529 CAPLUS
DOCUMENT NUMBER: 49:25529
ORIGINAL REFERENCE NO.: 49:4945h-i,4946a
TITLE: Cosmetological investigation on the juices of fodder plants. I. Composition and cutaneous action of alfalfa liquid
AUTHOR(S): Rovesti, Paolo; Variati, Gian Luigi
CORPORATE SOURCE: Lab. recherches inst. derives vegetaux, Milan
SOURCE: Industries Parfum. (1954), 9, 344-5
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Twenty-five kg. of green liquid obtained from a quintal of alfalfa contained dry residue 14.2, crude protein 4.74, carbohydrates 3.12, fats 1.53, cellulose material in suspension 0.08, inorg. matter 4.92, CaCO3 0.82, P 0.31, Fe 0.032, and chlorophyll 0.07%, choline 490, vitamin E 192, vitamin K 750, riboflavine 8, ascorbic acid 25, thiamine 212, nicotinic acid 23, and pantothenic acid 19 mg., carotene 115,000 I.U., alanine 0.085, valine 0.120, leucine 0.091, serine 0.132, tyrosine 0.011, phenylalanine 0.028, arginine 0.252, lysine 0.060, and tryptophan 0.273%. The inorg. salts consisted of CaO 41.3, K2O 22.6, Na2O 1.9, MgO 4.8, SiO2 8.9, NaCl 2.9, H3PO4 8.2, and H2SO4 5.4%. Evaporation of the liquid gave 5.8 kg. of a stable powder containing crude protein 45.12, fats 4.1, inorg. salts 18.10, and extractable nitrogenous materials 30.52%. This product has beneficial cosmetic effects upon the skin.

L8 ANSWER 215 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1955:37024 CAPLUS
DOCUMENT NUMBER: 49:37024
ORIGINAL REFERENCE NO.: 49:7136c-e
TITLE: Effects of 6-mercaptopurine on experimental tumors in tissue culture
AUTHOR(S): Biesele, John J.
CORPORATE SOURCE: Sloan-Kettering Inst. for Cancer Research, New York, NY
SOURCE: Annals of the New York Academy of Sciences (1954), 60, 228-34
CODEN: ANYAA9; ISSN: 0077-8923
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Mitosis of sarcoma cells in combination tissue cultures of mouse sarcoma 180 and embryonic skin is differentially inhibited by 6-mercaptopurine (6-MP). It is not influenced by the presence of explants of newborn mouse liver. The mitotic inhibition may be partially blocked

by an equimolar concentration of hypoxanthine, less so by adenine and guanine. Among nucleosides, inosine affords greatest protection against 6-MP, adenosine and 2-deoxyadenosine less, while xanthosine gives no protection. Among adenosine phosphates, adenylic acid is most effective against 6-MP for both sarcoma 180 and embryonic skin cells. Adenosine triphosphate is ineffective against sarcoma 180 cultures but effective against skin cells. The best inhibition of 6-MP resulted in bringing the mitotic incidence back to 1/2; the control value; 0.5 mg./ml. coenzyme A maintains mitotic activity at normal levels in sarcoma cultures treated simultaneously with 1.0 millimole/ml. 6-MP. A dose of 0.05 mg./ml. coenzyme A is slightly less effective, and neither dose will act against 4.0 millimoles 6-MP. Insulin greatly increases the susceptibility of embryo mouse skin to 6-MP.

L8 ANSWER 216 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1953:12861 CAPLUS
DOCUMENT NUMBER: 47:12861
ORIGINAL REFERENCE NO.: 47:2295a-e
TITLE: Some aspects of phosphorus metabolism in bone marrow. II. Changes in the content of phosphorus compounds and reducing substances in bone marrow and spleen, caused by ionizing radiation and other factors which depress the function of blood-forming tissue
AUTHOR(S): Lutwak-Mann, Cecilia
CORPORATE SOURCE: Univ. Cambridge, UK
SOURCE: Biochemical Journal (1952), 52, 356-64
CODEN: BIJOAK; ISSN: 0264-6021
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C.A. 46, 1124c. With suitably graded x-ray doses it was possible to produce a major breakdown of nucleic acid in the bone marrow and spleen without significantly affecting the lipide P content. The nucleic acid P is generally much more reactive than the lipide P towards a variety of agents. The changes in nucleic acid P were always accompanied by a fall in the content of ascorbic acid (possibly also of glutathione, but this is not yet completely established). The decline in the ascorbic acid content of the bone marrow, and to a smaller extent of the spleen, results not only from irradiation but also from the action of chemically unrelated substances (mustard gas, aminopterin, or colchicine). Blood-forming tissue contains 3 reducing substances (ascorbic acid, glutathione, and ergothioneine). A high fat, carbohydrate-free diet, which is adequate in protein and total calories, but failed to support growth, induced profound though reversible changes in the nucleic acid and lipide P of the bone marrow. Arbitrarily, the stage 7 days after exposure to 600 r. x-rays has been chosen to establish the extent of recovery of nucleic acid P in the bone marrow and spleen. Treatment of the exptl. animals (rats) with muscle or yeast adenylic acid, before and after irradiation, indicated that these substances (but not inosinic acid) delay the recovery of nucleic acid P and ascorbic acid in bone marrow and spleen, nor was any effect noted as the result of mild burns of a limited skin area. The folic acid antagonists, aminopterin and amethopterin, selectively affected the bone marrow but not the spleen, and colchicine acted in a similar manner but to a smaller extent. Mustard sulfoxide potentiated by dimethyldithiocarbamate, like x-rays, acted on both bone marrow and spleen. Prolonged administration of amidopyrine had no marked effect on rat bone marrow or spleen.

L8 ANSWER 217 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 69
ACCESSION NUMBER: 1953:29431 CAPLUS
DOCUMENT NUMBER: 47:29431
ORIGINAL REFERENCE NO.: 47:5003c-e
TITLE: Content of adenylic and adenosinetriphosphoric acids

in inflammation exudates
AUTHOR(S): Paskhina, T. S.
SOURCE: Doklady Akademii Nauk SSSR (1952), 87, 253-6
CODEN: DANKAS; ISSN: 0002-3264
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. Al'pern and Lipshits, C.A. 46, 2169c. The ability of inflammation exudates of humans or dogs to raise the permeability of skin capillaries of rabbits and to cause emigration of leucocytes from the skin is not related to the presence of adenine derivs., since the concentration of adenylic acid, adenosine triphosphate, and adenosine in the exudates is nearly zero; the concentration of adenine is 0.02-0.03% of its active
concentration The detns. were made chromatographically (cf. Cohn and Carter, C.A. 45, 2054a) with ultraviolet absorption being used for photography of the results.

L8 ANSWER 218 OF 221 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1951:7556 BIOSIS
DOCUMENT NUMBER: PREV19512500007580; BA25:7580
TITLE: Relation of the "anti-stiffness factor" to ,Collagen disease and calcinosis.
AUTHOR(S): LANSBURY, J.; SMITH, L. W.; WULZEN, R.; Van WAGTENDONK, W. J.
SOURCE: ANN RHEUMATIC DIS, (1950) Vol. 9, No. 2, pp. 97-108.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable
ENTRY DATE: Entered STN: May 2007
Last Updated on STN: May 2007
AB The "anti- stiffness factor" is fat-soluble vitamin which regulates muscular metabolism. The crude sources of this factor are green vegetables, raw cream, unheated molasses, and raw sugarcane juice. The nature of the active principle which is fat-soluble is still unknown. It is known that guinea pigs maintained lor months on a diet lacking in green vegetables develop general muscle stiffness and pain on movement of the carpal joints. Skeletal muscles atrophy, the animal becomes rigid in extension with flaring of the rib cage, and ultimately there are Ca deposits between the muscle fibers, around the joints, and under the skin as the condition progresses. Widespreac deposits of Ca in and around blood vessels and in parenchymal tissues are late manifestations. Deafness, corneal flattening, alopecia, polydypsia, diarrhea and eventual death are very late manifestations. The muscles of these animals showed atrophy, necrosis, fragmentation, hyaline changes and collagen necrosis with little cellular reaction and no fibrosis. Patchy necrosis of liver cells with occasional calcification is observed. Varying degrees of atrophy of the testicular tubules occurs. These pathological changes are associated with the following abnormal physiology: macrocytic anemia, eosinophilia, increase in sedimentation rate, and a reversal of the albumin/globulin ratio. There is also lowering of the creatine phosphate and adenosine-phosphate in muscle. This production of a collagen necrosis disease with calcinosis by means of a deficiency diet is of interest to the rheumatologists. The author has treated 10 cases of scleroderma, 4 with co-existing calcinosis with substances containing anti-stiffness factor. They found the treatment to be less effective than older treatment still in vogue. However, they stressed the similarity of the exptl. disease in animals produced by diets deficient in the anti-stiffness factor with the syndrome associated with calcinosis, dermatomyositis and scleroderma. ABSTRACT AUTHORS: C. L. Steinberg

L8 ANSWER 219 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1948:25671 CAPLUS
DOCUMENT NUMBER: 42:25671
ORIGINAL REFERENCE NO.: 42:5524e-i
TITLE: The requirements for components of the vitamin B complex in higher animals on a fat-poor or fat-free diet. II
AUTHOR(S): v. Euler, B.; v. Euler, H.; Ronnestam-Saberg, Inez
CORPORATE SOURCE: Univ. Stockholm, Swed.
SOURCE: Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie (1944), 280, 177-85
CODEN: HSZPAZ; ISSN: 0018-4888
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C.A. 37, 5459.7. This was an extension of previously reported work in which the same basal diet, supplements, and standard solution (I) of B vitamins were employed as were found suitable in the earlier work. The data for a 23-week exptl. period are summarized in the accompanying table. Group, Supplement, Gain in weight per rat, Degree of skin and fur changes, Survivors %; A, I without fat, 58.0, +(+), 80; B, I with soybean oil, 71.0, +, 80; C, I without adenylic acid, ..., ..., All dead in 14 weeks; D, I without p-aminobenzoic acid, 60.2, ++, 83; E, I without pantothenic acid, 70.5, ++, 67; F, I with less (7 γ) lactoflavin, 45.4, +++, 83; G, I with 7 γ lactoflavin and no p-aminobenzoic acid, 51.3, ++++++, 60; H, 0.2 g. of dried yeast daily, 82.0, (+), 100; A mild hematuria was found in group D and a severe hematuria was observed in group G. This indicates that renal damage occurred in these animals. The various findings are discussed in some detail.

L8 ANSWER 220 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1943:33952 CAPLUS
DOCUMENT NUMBER: 37:33952
ORIGINAL REFERENCE NO.: 37:5459g-i,5460a-c
TITLE: The requirements for components of the vitamin B complex in higher animals on a fat-poor or fat-free diet
AUTHOR(S): v. Euler, B.; v. Euler, H.; Saberg, I.
SOURCE: Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie (1942), 277, 26-46
CODEN: HSZPAZ; ISSN: 0018-4888
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB The growth of rats (3 groups of 7 animals each and 1 group later separated into 3 subgroups of 4 each) of 40 to 50 g. initial weight was studied. The basic ration consisted of wheat starch 316, wood meal 8, casein 60 and salt mixture 16 parts. Two times weekly 0.1 cc. of olive oil containing vitamin A and D concentrates was added. The daily addition of 0.2 g. brewer's yeast produced an average daily gain of 1.84 g. A standard solution was prepared containing in 0.2 cc. thiamine-HCl (I) 20 γ, nicotinamide (II) 16, pyridoxine-HCl (III) 8, Ca pantothenate (IV) 67.5, adenylic acid (V) 32, lactoflavin (VI) 4, p-aminobenzoic acid (VII) 20, $ZnCl_2$ 1.5 γ. The daily feeding of 0.4 cc. of this solution produced an average gain of 1.5 g. per day. A lower vitamin supply of 10 γ I, 16 II, 8 III, 66.5 IV, 32 V, 3 VI and 10 VII with 1.5 γ $ZnCl_2$ gave a weight gain of 1.03 g. in the first 3 weeks, that dropped to an average of 0.33 during a total of 16 weeks. An increase of I did not alter this response but increase of VI caused a considerable improvement of growth. Total omission of II or IV caused no change in the growth but omission of V improved the growth considerably.

The fat deficiency with a low level of all B factors caused a mild degree of skin manifestations and loss of hair. This was not changed by more III; excess of VI caused improvement or prevented the symptoms. In absence of II the dermatitis was more severe; then IV produced improvement but not cure. In absence of V the symptoms were milder. In absence of IV the tails became scaly and growths developed at mouth and ears. This was prevented by 0.2 cc. soybean oil twice weekly. The animals on the basic diet plus standard solution reproduced only after addition of 0.2 mg. α-tocopherol but even then the young lived not over 6 weeks. After addition of 10 mg. linolenic acid to the diet containing 15 γ VI no dermatitis developed and satisfactory growth occurred. Without the linolenic acid skin manifestations developed similar to those seen in VI deficiency. If linolenic acid was given without VI most animals died. The possible role of unsatd. fat acids in nutrition is discussed. As a result of the present and previous investigations the following vitamin B mixture is considered a suitable standard: I 12, H 30, III 15, IV 100, V 20, VI 18, VII 10, choline-HCl 1000 γ.

L8 ANSWER 221 OF 221 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1933:33368 CAPLUS
DOCUMENT NUMBER: 27:33368
ORIGINAL REFERENCE NO.: 27:3007a
TITLE: The effect of saponins on the permeability of the skin
AUTHOR(S): Milbradt, Wilhelm
SOURCE: Zeitschrift fuer die Gesamte Experimentelle Medizin (1933), 87, 745-54
CODEN: ZGEMAZ; ISSN: 0372-8722
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB The permeability of the skin is increased by saponins.

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  30 FILES SEARCHED...
L9          44 L2 AND (SKIN OR TOPICAL OR COSMETIC OR DERMATOLOGICAL)/AB

=> S L9 and py<=2002
'2002' NOT A VALID FIELD CODE
  15 FILES SEARCHED...
  25 FILES SEARCHED...
L10         30 L9 AND PY<=2002

=> DUP REM L10
DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2,
IMSPRODUCT, KOSMET, PCTGEN, USGENE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L10
L11          21 DUP REM L10 (9 DUPLICATES REMOVED)

=> D 1-21 IBIB ABS

L11  ANSWER 1 OF 21  CAPLUS  COPYRIGHT 2010 ACS on STN DUPLICATE 1
ACCESSION NUMBER:         2002:907175  CAPLUS
DOCUMENT NUMBER:          137:353261
TITLE:                    Nucleotide compounds that block the bitter taste of
                          oral compositions
INVENTOR(S):              McGregor, Richard Alexander; Gravina, Stephen Anthony
PATENT ASSIGNEE(S):       Linguagen Corp., USA
SOURCE:                   U.S. Pat. Appl. Publ., 16 pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     US 20020177576        A1    20021128    US 2001-865346          20010525 <--
     US 6942874            B2    20050913
     CA 2448638            A1    20021205    CA 2002-2448638         20020524 <--
     WO 2002096464         A1    20021205    WO 2002-US16502         20020524 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002303870         A1    20021209    AU 2002-303870          20020524 <--
     EP 1401500            A1    20040331    EP 2002-731932          20020524
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.:                       US 2001-865346      A  20010525
                                             WO 2002-US16502     W  20020524
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB   Nucleotides that block the bitter taste of foods, beverages,
     pharmaceutically active oral dose prepns., cosmetics and other
     bitter compds. that come into contact with taste tissue.  The nucleotides
     consist of a purine or pyrimidine group, or derivative thereof, and an
     ionizable phosphate or other anionic organic mol.
OS.CITING REF COUNT:      6     THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
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(6 CITINGS)
REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2001:823101 CAPLUS
DOCUMENT NUMBER: 135:343716
TITLE: Immunostimulant compositions containing nucleic acids useful for foods and beverages
INVENTOR(S): Nagafuchi, Shinya; Takahashi, Takeshi; Totsuka, Mamoru; Hachimura, Satoshi; Yajima, Koji; Kuwata, Tamotsu; Uenogawa, Shuichi
PATENT ASSIGNEE(S): Meiji Milk Products, Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001314172	A	20011113	JP 2000-131406	20000428 <--
JP 4010390	B2	20071121		

PRIORITY APPLN. INFO.: JP 1999-266139 A 19990920
JP 2000-57507 A 20000302

AB Immunostimulant compns. contain nucleic acid compns. as active ingredients. Oral intake of the compns. increases the ratios of intestinal intraepithelial TCR$\gamma\delta$+ T lymphocyte subsets, enhances production of IFN-γ, IL-2, IL-7, and TGF-β in small intestinal epithelial cells and production of IL-12 in macrophages and splenocytes, and induces antigen-specific IgA antibodies. Formulation examples are given for infant formula, tablets, infusions, milk, cosmetics, and ointments containing nucleic acids, nucleotides, nucleosides, and/or nucleic acid bases.
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L11 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 2000:423621 CAPLUS
DOCUMENT NUMBER: 133:292904
TITLE: Generation and photosensitization properties of the oxidized radical of riboflavin: a laser flash photolysis study
AUTHOR(S): Han, Zhen-Hui; Lu, Chang-Yuan; Wang, Wen-Feng; Lin, Wei-Zhen; Yao, Si-De; Lin, Nian-Yun
CORPORATE SOURCE: Laboratory of Radiation Chemistry, Shanghai Institute of Nuclear Research, Academia Sinica, Shanghai, 201800, Peop. Rep. China
SOURCE: JAERI-Conf (2000), 2000-001(JCBSRC '99, the 8th Japan-China Bilateral Symposium on Radiation Chemistry, 1999), 135-139
CODEN: JECNEC
PUBLISHER: Japan Atomic Energy Research Institute
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Riboflavin (RF) is an important endogenous cellular photosensitizer in vivo and in vitro. Photoexcitation of riboflavin may potentially occur in the organs and tissues permeable to light, such as the skin or eye, and result in DNA and other cell-matrix damage causing inflammation and accelerating aging. The possibility of DNA damage resulting from an electron transfer reaction involving the oxidized radical of riboflavin

has prompted us to generate the intermediate using both photoionization and photooxidn. techniques. The results reported herein suggested that electron transfer caused by RF•+/RF(-H)• may be of wider importance in photobiol. and photochem. of flavin.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 1998:527195 CAPLUS
DOCUMENT NUMBER: 129:144880
ORIGINAL REFERENCE NO.: 129:29424a
TITLE: P2 receptor agonists, antagonists and modulators of endogenous ATP release, and therapeutic use
INVENTOR(S): Gallagher, James Anthony; Bowler, Wayne Barry
PATENT ASSIGNEE(S): The University of Liverpool, UK
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9832429	A2	19980730	WO 1998-GB205	19980123 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9856747	A	19980818	AU 1998-56747	19980123 <--
PRIORITY APPLN. INFO.:			GB 1997-1374 A	19970123
			WO 1998-GB205 W	19980123

AB The invention relates to P2 agonists and antagonists or a compound which will stimulate or inhibit endogenous ATP (ATP) production, and more particularly to novel medical uses for same. More particularly still it relates to treating skin conditions characterized by hyperproliferation of keratinocytes, including for example, keloid formation, dermatitis and psoriasis or enhancing wound healing. The invention provides the use of an agonist or antagonist of a type P2-receptor or a compound which will stimulate or inhibit ATP (ATP) production for the manufacture of a medicament for treating wounds or skin conditions characterized by hyperproliferation of keratinocytes or acanthosis. It also provides a pharmaceutical composition comprising a growth factor, a pharmaceutically acceptable carrier and either an agonist of a P2Y receptor or a compound which will stimulate ATP (ATP) production

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L11 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 5

ACCESSION NUMBER: 1990:617811 CAPLUS
DOCUMENT NUMBER: 113:217811
ORIGINAL REFERENCE NO.: 113:36689a,36692a
TITLE: Skin-protectant compositions comprising nucleic acids, nucleotides and nucleosides
INVENTOR(S): Pauly, Georges; Pauly, Gilles; Pauly, Marc
PATENT ASSIGNEE(S): Laboratoires Serobiologiques S. A., Fr.

SOURCE: Fr. Demande, 53 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2634374	A1	19900126	FR 1988-9747	19880719 <--
FR 2634374	B1	19931015		
WO 9000894	A1	19900208	WO 1989-FR377	19890717 <--
W: CH, DE, GB, LU, NL, US				
NL 8920746	A	19900601	NL 1989-20746	19890717 <--
DE 3990820	T0	19900719	DE 1989-3990820	19890717 <--
DE 3990820	C2	20010215		
CH 682453	A5	19930930	CH 1990-1099	19890717 <--
GB 2233557	A	19910116	GB 1990-6119	19900319 <--
GB 2233557	B	19930331		

PRIORITY APPLN. INFO.: FR 1988-9747 A 19880719
WO 1989-FR377 A 19890717

AB A photoprotectant and cytophotoprotectant composition for the skin comprises nucleic acids, nucleotides or their salts, and nucleosides. The salts are with inorg. or organic bases and with basic amino acids or peptides. The compns. protect the skin cells, especially the Langerhans cells against the noxious effects of light. The compns. may also comprise amino acids and/or protein hydrolyzates. A powdery composition comprised histidine ribonucleate 31.65, cytidine-thymidine-uridine mixture 16.65, histidine-HCl 18.33, and anhydrous collagen hydrolyzate 33.37 (no units). RNA K salt (1%) protected human Langerhans cells, in vitro, against the noxious effect of UV light, as shown by the preservation of HLA-DR+ specific sites.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 6
ACCESSION NUMBER: 1990:402641 CAPLUS
DOCUMENT NUMBER: 113:2641
ORIGINAL REFERENCE NO.: 113:539a,542a
TITLE: Studies on chemical protectors against radiation. XXVIII. Protective effect of nucleic acid constituents on radiation damage induced by x-irradiation
AUTHOR(S): Sato, Yushi; Ohta, Setsuko; Shinoda, Masato
CORPORATE SOURCE: Fac. Pharm. Sci., Hoshi Univ., Tokyo, 142, Japan
SOURCE: Yakugaku Zasshi (1990), 110(3), 210-17
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB The effects of various nucleic acid constituents, i.e., bases, nucleosides, and nucleotides on lethality and skin injury induced by soft x-irradiation were studied in ICR mice. The survival effect was determined by use of survival days after irradiation of LD of 70 kVp, 2100 R and the protective effect on skin injury was determined by use of degrees of skin injury after 30 kVp, 1100 R soft x-irradiation The survival effect was observed by a single injection of inosine at 120, 60, and 5 min before irradiation and by injection 3 times after irradiation The other nucleic acid constituents had no effect on survival. The protective effect for skin injury was observed by a single injection of adenosine, guanosine, inosine, 5'-AMP, 5'-GMP, and 5'-IMP before irradiation

The protective effect for skin injury by injection 3 times before irradiation was shown by adenosine, inosine, 5'-AMP, and 5'-IMP. A relationship between radical scavenging activities and the protective effect from radiation by various nucleosides was not observed

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L11 ANSWER 7 OF 21 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
ACCESSION NUMBER: 1988:88339 BIOSIS
DOCUMENT NUMBER: PREV198885045111; BA85:45111
TITLE: AUGMENTATION OF NATURAL IMMUNE DEFENSE MECHANISMS AND THERAPEUTIC POTENTIAL OF A MISMATCHED DOUBLE-STRANDED POLYNUCLEOTIDE IN CUTANEOUS HERPES SIMPLEX VIRUS TYPE 2 INFECTION.
AUTHOR(S): AURELIAN L [Reprint author]; RINEHART C L; WACHSMAN M; KULKA M; TS'O P O P
CORPORATE SOURCE: DEP PHARMACOL, THE UNIV MED SCH MED, BALTIMORE, MD, USA
SOURCE: Journal of General Virology, (1987) Vol. 68, No. 11, pp. 2831-2838.
CODEN: JGVIAY. ISSN: 0022-1317.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 11 Feb 1988
Last Updated on STN: 11 Feb 1988

AB We studied the effect of an analogue of polyinosinic acid:polycytidylic acid, the mismatched poly(rI) · poly(rC12U), on herpes simplex virus type 2 (HSV-2)-induced cutaneous disease in the guinea-pig. Recurrence patterns and HSV-2-induced immune responses were also defined. Intranasal administration (1.5 μg/g body weight, five doses at 48 h intervals) of poly(rI) · poly(rC12U) during initial HSV-2 infection caused a significant ($P < 0.05$) reduction in virus titres in the skin and decreased ($P < 0.01$) the duration and severity of the primary cutaneous lesions. The incidence and frequency of subsequent recurrent episodes were also significantly ($P < 0.01$) reduced. Titres of serum neutralizing antibody were identical in treated and untreated animals. Interferon (IFN) activity was detectable in the sera from poly(rI) · poly(rC12U)-treated animals. Peripheral blood mononuclear (PBL) and spleen cells from treated animals had enhanced cytotoxic activity for HSV-2-infected and uninfected target cells. The cytotoxic activity of the PBL was enhanced by treatment in vitro with poly(rI) · poly(rC12U) or IFN.

L11 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1979:68662 CAPLUS
DOCUMENT NUMBER: 90:68662
ORIGINAL REFERENCE NO.: 90:10831a,10834a
TITLE: Simultaneous analysis of free nucleoside mono- and polyphosphates in tissue by high-pressure liquid chromatography
AUTHOR(S): Mizobuchi, Hiroshi; Takei, Kazukata; Ogura, Ryohei
CORPORATE SOURCE: Dep. Med. Biochem., Kurume Univ. Sch. Med., Kurume, Japan
SOURCE: Kurume Medical Journal (1978), 25(3), 175-81
CODEN: KRMJAC; ISSN: 0023-5679
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Nucleoside mono- and polyphosphates were determined in skin and liver of guinea pigs by high-pressure liquid chromatog. on a Li Chrosorb-NH2 column. Free nucleotides were extracted using a MeOH-EtOH mixture The nucleotides eluted in the order cytosine, uridine, adenine, and guanine, except for the monophosphates, in which AMP eluted before UMP. Anal. time

was <40 min.

L11 ANSWER 9 OF 21 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN
DUPLICATE 7
ACCESSION NUMBER: 1979:150343 BIOSIS
DOCUMENT NUMBER: PREV197967030343; BA67:30343
TITLE: RETENTION IMPROVEMENT BY TOPICAL APPLICATION OF UMP INTO DIFFERENT BRAIN AREAS.
AUTHOR(S): OTT T [Reprint author]; GRECKSCH G; MATTHIES H
CORPORATE SOURCE: INST PHARMACOL TOXICOL, MED ACAD, 301 MAGDEBURG, E GER
SOURCE: Medical Biology (Helsinki), (1978) Vol. 56, No. 3, pp. 133-137.
CODEN: MDBYAS. ISSN: 0302-2137.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB The effect of UMP on the consolidation of a brightness-discrimination reaction after topical application of this RNA precursor into the hippocampus, the neocortex or the mesencephalic reticular formation (MRF) was examined. Thirty minutes before the rats started their training in a Y-chamber, UMP was injected into each animal through cannula implanted into the particular brain area. When injected into hippocampus or MRF, UMP exerted no influence on acquisition, but after epidural UMP injection an impairment of acquisition was observed. After intrahippocampal or epidural UMP application the retention test conducted 48 h after training showed a significant improvement in retention performance, while UMP injection into MRF showed no influence on retention. The retention-improving effect of UMP was probably not induced by activation of ascending neuronal systems.

L11 ANSWER 10 OF 21 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 1977177911 EMBASE
TITLE: Adenosine and adenine nucleotides stimulation on skin (epidermal) adenylate cyclase.
AUTHOR: Iizuka, H.; Adachi, K.; Halprin, K.M.; Levine, V.
CORPORATE SOURCE: Dermatol. Serv., Miami VA Hosp., Miami, Fla. 33125, United States.
SOURCE: Biochimica et Biophysica Acta, (1976) Vol. 444, No. 3, pp. 685-693.
ISSN: 0006-3002 CODEN: BBACAQ
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 013 Dermatology and Venereology
029 Clinical and Experimental Biochemistry
037 Drug Literature Index
LANGUAGE: English
AB Adenosine, AMP, ADP and ATP activated adenylate cyclase in pig skin (epidermis) slices resulting in the accumulation of cyclic AMP. This effect was highly potentiated by the addition of the cyclic AMP phosphodiesterase inhibitor, papaverine. But another inhibitor, theophylline, strongly blocked the activation of adenylate cyclase by adenosine and adenine nucleotides. Theophylline apparently competed with adenosine for the cell surface receptor. Like theophylline, the addition of adenine alone caused no accumulation of cyclic AMP, but it significantly inhibited the stimulatory effect of adenosine. Guanosine, or guanine, cytidine, uridine, or thymidine nucleotides had no effect on the accumulation of cyclic AMP. Among other adenine nucleotides we tested, adenosine 5' monophosphoramidate, but not adenosine 5' monosulfate, significantly increased cyclic AMP especially with the addition of papaverine. Neither 2' nor 3' adenylic acid were effective. Our data indicate that pig epidermis has four specific and independent adenylate cyclase systems for adenosine (and adenine nucleotides),

histamine, epinephrine and prostaglandin E.

L11 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1976:403733 CAPLUS
DOCUMENT NUMBER: 85:3733
ORIGINAL REFERENCE NO.: 85:611a,614a
TITLE: Nucleic acid-reactive antibodies of restricted heterogeneity
AUTHOR(S): Cameron, Deborah J.; Erlanger, Bernard F.
CORPORATE SOURCE: Coll. Physicians Surg., Columbia Univ., New York, NY, USA
SOURCE: Immunochemistry (1976), 13(3), 263-9
CODEN: IMCHAZ; ISSN: 0019-2791
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Antibodies of the IgG-type and of restricted heterogeneity were isolated from 3 rabbits immunized with (AMP)2-gramicidin S. Antibody banding patterns were constant in 1 rabbit but varied after each boost in the other 2 rabbits. These antibodies, which reacted with DNA and RNA, were highly specific for AMP (Ka >106M-1) but could bind other ligands, suggesting antibody combining sites are multispecific. Crossreactivity of the antibodies with hydralazine (Kq >104M-1) may be relevant to the drug's induction of nucleic acid-reactive antibodies. Immunized rabbits displayed delayed hypersensitivity specific for adenine, indicating T-cell as well as B-cell interactions. A delayed skin reaction was also produced by gramicidin S.

L11 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1975:471618 CAPLUS
DOCUMENT NUMBER: 83:71618
ORIGINAL REFERENCE NO.: 83:11193a,11196a
TITLE: In vitro analysis of the control of keratinocyte proliferation in human epidermis by physiologic and pharmacologic agents
AUTHOR(S): Flaxman, B. Allen; Harper, Robert A.
CORPORATE SOURCE: Sect. Med., Brown Univ., Providence, RI, USA
SOURCE: Journal of Investigative Dermatology (1975), 65(1), 53-60
CODEN: JIDEAE; ISSN: 0022-202X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Human keratinocytes grown in vitro as epithelial outgrowths or as organ cultures maintain many of their normal functions such as proliferation and keratinization. These in vitro systems have been used to analyze the effect of various agents on proliferation. All adenine nucleotides, including dibutyryl cyclic AMP (I) [362-74-3], blocked mitosis in the G2 part of the cell cycle at concns. of 1 + 10-4M. Some nonadenine nucleotides also showed this effect, but only at higher concns., an indication that the effect was specific for adenine nucleotides. I and theophylline [58-55-9] both depressed the incorporation of [3H]thymidine into DNA. Catechol amines such as DL-isoproterenol [149-53-1], epinephrine [51-43-4], and norepinephrine [51-41-2] were also potent inhibitors of mitosis (G2 block) at concns. of 1 + 10-8 to 1 + 10-10M. The fact that the effect could be blocked by the beta-blocking agent, propranolol [525-66-6], suggests the existence of specific membrane receptor sites. However, dichloroisoproterenol [59-61-0], another beta blocker, had distinct inhibitory properties in itself and thus indicated that the mechanism of action of catechol amines in human keratinocytes is complex and may involve more than binding to specific receptor sites. Histamine [51-45-6] at a concentration of 2 + 10-6M was also a strong mitotic inhibitor. This finding is directly opposed to that in rat

skin where mitosis is stimulated. Imidazole acetate [645-65-8], a histamine breakdown product, was found to be a striking mitotic stimulator in organ culture. A water-extractable protein (chalone) from human skin also caused a block in G2. Most of the substances tested occur naturally in the cell or organism and their ability to stimulate or depress proliferation in vitro suggests that they play a regulatory role in vivo.

L11 ANSWER 13 OF 21 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 1976136432 EMBASE
TITLE: In vitro analysis of the control of keratinocyte proliferation in human epidermis by physiologic and pharmacologic agents.
AUTHOR: Flaxman, B.A.; Harper, R.A.
CORPORATE SOURCE: Subsection Dermatol., Sect. Med., Brown Univ., Providence, R.I., United States.
SOURCE: Journal of Investigative Dermatology, (1975) Vol. 65, No. 1, pp. 52-59.
ISSN: 0022-202X CODEN: JIDEAE
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 013 Dermatology and Venereology
030 Clinical and Experimental Pharmacology
037 Drug Literature Index
LANGUAGE: English

AB Human keratinocytes grown in vitro as epithelial outgrowths or as organ cultures maintain many of their normal functions such as proliferation and keratinization. These in vitro systems have been used to analyze the effect of various agents on proliferation. All adenine nucleotides, including dibutyryl cyclic AMP, blocked mitosis in the G2 part of the cell cycle at concentrations of 1 x 10-4 M. Some nonadenine nucleotides also showed this effect, but only at higher concentrations, an indication that the effect was specific for adenine nucleotides. Dibutyryl cyclic AMP and theophylline both depressed the incorporation of [3H] thymidine into DNA. Catecholamines such as isoproterenol, epinephrine, and norepinephrine were also potent inhibitors of mitosis (G2 block) at concentrations of 1 x 10-8 to 1 x 10-10 M. The fact that the effect could be blocked by the beta blocking agent, propranolol, suggests the existence of specific membrane receptor sites. However, dichloroisoproterenol, another beta blocker, had distinct inhibitory properties in itself and thus indicated that the mechanism of action of catecholamines in human keratinocytes is complex and may involve more than binding to specific receptor sites. Histamine at a concentration of 2 x 10-6 M was also a strong mitotic inhibitor. This finding is directly opposed to that in rat skin where mitosis is stimulated. Imidazole acetate, a histamine breakdown product, was found to be a striking mitotic stimulator in organ culture. A water extractable protein (chalone) from human skin also caused a block in G2. Most of the substances tested occur naturally in the cell or organism and their ability to stimulate or depress proliferation in vitro suggests that they play a regulatory role in vivo.

L11 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1973:453744 CAPLUS
DOCUMENT NUMBER: 79:53744
ORIGINAL REFERENCE NO.: 79:8679a,8682a
TITLE: Nucleotide-amino acid adducts
INVENTOR(S): Jacobi, Otto
PATENT ASSIGNEE(S): Kolmar Research Center G.m.b.H
SOURCE: Ger. Offen., 9 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2156556	A1	19730524	DE 1971-2156556	19711115 <--
PRIORITY APPLN. INFO.:			DE 1971-2156556	19711115

AB Twenty addition compds. of nucleotides and amino carboxylic acids or amino sulfo carboxylic acids, useful as light stabilizers, e.g. for cosmetics, were prepared Thus, addition of 1 mole UMP in H2O to 2 moles 4-H2NC6H4CO2H in Me2CO, dissolving the precipitate in NaOH, and drying gave 1:2 UMP-Na 4-aminobenzoate adduct. Reaction of Na GDP in H2O with an aqueous solution containing K 3-amino-2-naphthoate and di-NH4 5-amino-3-sulfosalicylate gave Na GDP-(K 3-amino-2-naphthoate)-(diammonium 5-amino-3-sulfosalicylate) adduct.

L11 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1970:422575 CAPLUS
DOCUMENT NUMBER: 73:22575
ORIGINAL REFERENCE NO.: 73:3741a,3744a
TITLE: Polynucleotides active as inducers of interferon production in living animal cells
INVENTOR(S): Field, Arthur K.; Tytell, Alfred A.; Lampson, George P.; Hilleman, Maurice R.
PATENT ASSIGNEE(S): Merck and Co., Inc.
SOURCE: S. African, 67 pp.
CODEN: SFXXAB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ZA 6707677	A	19690623	ZA 1967-7677	19671111 <--
DE 1617659	B2	19810521	DE 1967-M76681	19671221 <--
DE 1617659	C3	19820121		
NL 159282	B	19790215	NL 1967-17585	19671222 <--
US 4124702	A	19781107	US 1976-750499	19761214 <--
PRIORITY APPLN. INFO.:			US 1966-604137 A	19661223
			US 1967-641119 A	19670525
			US 1967-659308 A	19671009
			US 1967-684936 A	19671122
			US 1971-160188 A	19710706

AB Interferons are proteins of relatively low mol. weight which are produced by cells. This production is stimulated by viruses, certain other microbial agents, and by several substances of various origin. The interferons impart resistance to viral infection in uninfected cells for prolonged periods of time when given prior to virus. They are broad-spectrum with respect to virus species but are relatively host species-specific. Multistranded polynucleotides and sep. RNAs have exceptional properties as interferon inducers, but they must possess a high degree of purity and multistrandedness. Four representative sources of multistranded RNA are: (1) a complex of synthetic polynucleotides, (2) a RNA produced by mixing an extract of Penicillium funiculosum with phenol to obtain a release of the interferon inducing RNA which is then recovered in a highly purified form, (3) a RNA obtained from reovirus type 3 virions, and (4) a replicative form of RNA obtained by infecting living cells with a RNA virus. These sources of the multistranded RNA, its recovery, and use are described in detail. For example, the multistranded RNA may be prepared from a complex of synthetic polynucleotides as follows: a solution of polyinosinic acid (I)

is prepared which contains 550 μg/ml in 0.01M glycylglycine-0.1M NaCl. A solution of polycytidylic acid (II) is prepared containing 500 μg/ml in the same buffer. The 2 solns. are mixed to give a mole ratio of 1:1 with respect to bases, and the resulting solution is used directly as the source of the complexed polymers (Poly I:II). The complexed polymers formed in vitro can be characterized by a hypochromic shift in the uv absorption spectrum, sucrose d. gradient fractionation, chromatog., and the capacity to induce the production of interferon, an activity which is lacking in either of the polynucleotides from which the complex is formed. The induction of interferon formation in vivo is achieved by administration of the complexed polymer, parenterally or superficially to a mucous membrane (i.e. intranasal), to a rabbit, mouse, or other animal. In rabbits the threshold dose is .apprx.0.05 μg/kg and in mice 0.5 mg/kg. At these levels there are no signs of toxicity either locally or generally. Blood samples are taken after 1-5 hr, the serum separated, sterilized, and titrated at several dilns. in culture tubes containing cells from the same animal species as that used for the host. After incubation at 35° for 18-24 hr, the cell cultures are challenged with 1 of the known cytopathic viruses and again incubated at 35° for 3 days. The interferon titer is determined as the reciprocal of the dilution at which 50% of the tubes show no cytopathic effects. The induced interferon can be isolated by chromatog. on CM-Sephadex and characterized by host specificity, trypsin sensitivity, isoelec. point, and mol. weight determination The isoelec. point of rabbit interferon induced by Poly I:II is 6.8-6.9 and the mol. weight 49,000-52,000. The polynucleotides can be used as an inducer for interferon production, either in vivo or in vitro. Their principal use is injection into an animal or a person so that interferon is produced in vivo in large amount, thus protecting the host against infection by a variety of viruses. For instance, as a prophylactic intranasal preparation against respiratory viruses such as the common cold, a dose of 1-100 mg of Poly I:II could be applied to the nasal and oral membranes every 2 or 3 days in an aqueous suspension in an aspirator spray so that 1 or 2 sprays would deliver 5-10 mg. The period of administration is due to the prolonged duration of the induced interferon. For prophylactic and therapeutic use in the eyes, a conventional eye drop preparation such as a sterile peanut oil is made up so that a single drop contains 1-100 mg of Poly I:II to be applied to the eye every 2-3 days. Therapeutic activity could benefit an eye infected with herpesvirus, adenovirus, vaccinia virus, and trachoma [Chlamydia trachomatis]. Cutaneous prepns. for abraded skin or sterile solns. for parenteral administration could also be prepared

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L11 ANSWER 16 OF 21 TOXCENTER COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1970:55144 TOXCENTER
COPYRIGHT: Copyright 2010 ACS
DOCUMENT NUMBER: CA07305022575A
TITLE: Polynucleotides active as inducers of interferon production in living animal cells
AUTHOR(S): Field, Arthur K.; Tytell, Alfred A.; Lampson, George P.; Hilleman, Maurice R.
CORPORATE SOURCE: ASSIGNEE: Merck and Co., Inc.
PATENT INFORMATION: ZA 677677 23 Jun 1969
SOURCE: (1969) S. African, 67 pp.
CODEN: SFXXAB.
DOCUMENT TYPE: Patent
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 1970:422575
LANGUAGE: English

ENTRY DATE: Entered STN: 16 Nov 2001
Last Updated on STN: 26 Oct 2004

AB Interferons are proteins of relatively low mol. weight which are produced by cells. This production is stimulated by viruses, certain other microbial agents, and by several substances of various origin. The interferons impart resistance to viral infection in uninfected cells for prolonged periods of time when given prior to virus. They are broad-spectrum with respect to virus species but are relatively host species-specific. Multistranded polynucleotides and sep. RNAs have exceptional properties as interferon inducers, but they must possess a high degree of purity and multistrandedness. Four representative sources of multistranded RNA are: (1) a complex of synthetic polynucleotides, (2) a RNA produced by mixing an extract of Penicillium funiculosum with phenol to obtain a release of the interferon inducing RNA which is then recovered in a highly purified form, (3) a RNA obtained from reovirus type 3 virions, and (4) a replicative form of RNA obtained by infecting living cells with a RNA virus. These sources of the multistranded RNA, its recovery, and use are described in detail. For example, the multistranded RNA may be prepared from a complex of synthetic polynucleotides as follows: a solution of polyinosinic acid (I) is prepared which contains 550 μg/ml in 0.01M glycylglycine-0.1M NaCl. A solution of polycytidylic acid (II) is prepared containing 500 μg/ml in the same buffer. The 2 solns. are mixed to give a mole ratio of 1:1 with respect to bases, and the resulting solution is used directly as the source of the complexed polymers (Poly I:II). The complexed polymers formed in vitro can be characterized by a hypochromic shift in the uv absorption spectrum, sucrose d. gradient fractionation, chromatog., and the capacity to induce the production of interferon, an activity which is lacking in either of the polynucleotides from which the complex is formed. The induction of interferon formation in vivo is achieved by administration of the complexed polymer, parenterally or superficially to a mucous membrane (i.e. intranasal), to a rabbit, mouse, or other animal. In rabbits the threshold dose is .apprx.0.05 μg/kg and in mice 0.5 mg/kg. At these levels there are no signs of toxicity either locally or generally. Blood samples are taken after 1-5 hr, the serum separated, sterilized, and titrated at several dilns. in culture tubes containing cells from the same animal species as that used for the host. After incubation at 35° for 18-24 hr, the cell cultures are challenged with 1 of the known cytopathic viruses and again incubated at 35° for 3 days. The interferon titer is determined as the reciprocal of the dilution at which 50% of the tubes show no cytopathic effects. The induced interferon can be isolated by chromatog. on CM-Sephadex and characterized by host specificity, trypsin sensitivity, isoelec. point, and mol. weight determination The isoelec. point of rabbit interferon induced by Poly I:II is 6.8-6.9 and the mol. weight 49,000-52,000. The polynucleotides can be used as an inducer for interferon production, either in vivo or in vitro. Their principal use is injection into an animal or a person so that interferon is produced in vivo in large amount, thus protecting the host against infection by a variety of viruses. For instance, as a prophylactic intranasal preparation against respiratory viruses such as the common cold, a dose of 1-100 mg of Poly I:II could be applied to the nasal and oral membranes every 2 or 3 days in an aqueous suspension in an aspirator spray so that 1 or 2 sprays would deliver 5-10 mg. The period of administration is due to the prolonged duration of the induced interferon. For prophylactic and therapeutic use in the eyes, a conventional eye drop preparation such as a sterile peanut oil is made up so that a single drop contains 1-100 mg of Poly I:II to be applied to the eye every 2-3 days. Therapeutic activity could benefit an eye infected with herpesvirus, adenovirus, vaccinia virus, and trachoma [Chlamydia trachomatis]. Cutaneous prepns. for abraded skin or sterile solns. for parenteral administration could also be prepared

L11 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1968:85688 CAPLUS
DOCUMENT NUMBER: 68:85688
ORIGINAL REFERENCE NO.: 68:16487a,16490a
TITLE: Biochemical stigmata of epidermis reactivity. I. Behavior of acid-soluble, ultraviolet-absorbing compounds of guinea pig epidermis under the influence of autolysis, regeneration stimulation, cetane application, and methotrexate treatment
AUTHOR(S): Schwarz, Eberhard; Klaschka, F.
CORPORATE SOURCE: Rudolf Virchow-Krankenhaus, Berlin, Fed. Rep. Ger.
SOURCE: Hautarzt (1967), 18(12), 532-5
CODEN: HAUTAW; ISSN: 0017-8470
DOCUMENT TYPE: Journal
LANGUAGE: German
AB Changes in the amts. of acid-soluble, uv-absorbing material in guinea pig epidermis following stimulation by repeated shaving or with cetane (hexadecane) or methotrexate (2 mg./kg./day for 8 days or 6 weeks) were studied by column chromatog. on Dowex 50-X8 eluted with HCOONH4. Fractions Ia-c contained AMP, GMP, CMP, and UMP; Id/e, hypoxanthine and guanosine; IIa1, free guanine; IIa2, probably cytosine; IIa3, probably cytidine; III, which contained more than half of the total uv-absorbing material, contained urocanic acid; and IV, free adenine. Under autolytic conditions (hydrolysis of skin in HClO4), uv-absorbing fractions decreased. Skin stimulation by shaving, as well as cetane application, decreased fractions Id/e, IIa2, and particularly III; fractions Ia-c and IV were not significantly affected. Fraction IIa1 was observed after both treatments but not in controls; fraction IIa3 was observed only after treatment with cetane. Methotrexate treatment for 8 days reduced fractions Id/e, IIa2, IV, and particularly Ia-c, produced IIa1, did not affect III, and did not produce IIa3. After methotrexate treatment for 6 weeks, fractions Ia-c and III were similar to control values, and IV, Id/e, and particularly IIa2 were reduced. The levels of IIa1 were the highest observed; no IIa3 was produced. Fraction III is related to keratohyalin formation in the keratotic process.

L11 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1967:409218 CAPLUS
DOCUMENT NUMBER: 67:9218
ORIGINAL REFERENCE NO.: 67:1719a,1722a
TITLE: Acid soluble, uv-absorbing compounds of the guinea pig epidermis
AUTHOR(S): Schwarz, Eberhard
CORPORATE SOURCE: Freie Univ., Berlin, Fed. Rep. Ger.
SOURCE: Archiv fuer Klinische und Experimentelle Dermatologie (1967), 228, 179-87
CODEN: AKEDAX; ISSN: 0300-8614
DOCUMENT TYPE: Journal
LANGUAGE: German
AB The skin of 8 guinea pigs (400 g.) was pooled in N HClO4 (3-4 g. fresh weight/25 ml.). The mixture was homogenized and centrifuged, and the samples reextd. Supernatants were neutralized with 5N KOH and concentrated in vacuo. The composition of the epidermis extract was determined by column chromatog. on Dowex 50, measuring the eluate continuously at 254 mμ. The uv-absorbing material was divided into subfractions, and paper chromatog. was carried out. Several uv-absorbing bands in the eluate of the Dowex column were further analyzed. UMP, CMP, adenine, guanine, uric acid, and occasionally hypoxanthine were found; thymine was not detected.

L11 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1965:68837 CAPLUS
DOCUMENT NUMBER: 62:68837
ORIGINAL REFERENCE NO.: 62:12265g-h
TITLE: Deoxyribonucleic acid in human skin studied in vitro by autoradiography
AUTHOR(S): Fukuyama, Kimie; Nakamura, Toshio; Bernstein, I. A.
CORPORATE SOURCE: Univ. of Michigan, Ann Arbor
SOURCE: Journal of Investigative Dermatology (1965), 44, 29-32
CODEN: JIDEAE; ISSN: 0022-202X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Thymidine-3H (2 μc./ml.) was used as tracer for autoradiographic study of DNA synthesis in the epidermis of human skin cultures at pH 7.2-7.4. In normal skin DNA was synthesized in nuclei of basal layers as well as in those above the basal layer. The number of labeled cells was abnormally high in verrucous and eczematous lesions, indicating a high rate of proliferation of these cells.

L11 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 8
ACCESSION NUMBER: 1965:52817 CAPLUS
DOCUMENT NUMBER: 62:52817
ORIGINAL REFERENCE NO.: 62:9388a-c
TITLE: Evidences of a photoreaction of the photosensitizing furocoumarins with DNA and the pyrimidine nucleosides and nucleotides
AUTHOR(S): Musajo, L.; Rodighiero, G.; Dall'Acqua, F.
CORPORATE SOURCE: Univ. Padova, Italy
SOURCE: Experientia (1965), 21(1), 24-6
CODEN: EXPEAM; ISSN: 0014-4754
DOCUMENT TYPE: Journal
LANGUAGE: English
AB cf. CA 62, 5591e. In a study of the modifications occurring in DNA and furocoumarin (I) solns. irradiated with uv light (3655 A.), an evident shift of the maximum from 450 to 400 mμ, with an increased fluorescent intensity, was observed spectrofluorimetrically following the irradiation of a mixture of DNA and psoralen (II), the most skin-active I. The fluorescence spectrum of II, irradiated alone, did not exhibit a similar change. Analogous modifications in the fluorescence spectra were also observed for solns. of DNA added with other skin-photosensitizing I, such as xanthotoxin, bergapten, 4'-methylpsoralen, and 4,4',8-trimethylpsoralen, but no modifications were observed after irradiating a solution of DNA in the presence of skin-inactive I, such as bergaptol, imperatorin, and isopimpinellin. On irradiating aqueous solns. containing one of the moieties occurring in DNA and RNA and II, and preparing the chromatogram of the resulting product, modifications in the fluorescence spectra were observed only with the nucleosides and nucleotides derived from a pyrimidine base (i.e., thymidylic, cytidylic, deoxycytidylic, and uridylic acids, and thymidine, cytidine, deoxycytidine, and uridine), the modifications being identical, in all cases, and similar to those observed for DNA. No modifications were observed with the nucleosides and nucleotides derived from a purine, nor with the simple purine or pyrimidine bases. A photoreaction occurred when a solution of DNA was irradiated in the presence of a skin-active I.
OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

L11 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1964:77419 CAPLUS
DOCUMENT NUMBER: 60:77419
ORIGINAL REFERENCE NO.: 60:13644b-c
TITLE: Acid-soluble nucleotides and peptides of skin

AUTHOR(S): Urivetzky, Morton; Seifter, Sam; Meilman, Edward
CORPORATE SOURCE: Albert Einstein Coll. of Med., New York, NY
SOURCE: Proceedings of the Society for Experimental Biology and Medicine (1964), 115, 305-10
CODEN: PSEBAA; ISSN: 0037-9727
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB A cold-$HClO_4$ extract was made of the skins of young rabbits and separated into fractions by described methods. Small amts. of substances reacting with alkaline $HONH_2$ solution were detected in some fractions. Two fractions subjected to paper electrophoresis contained overlapping nucleotide and peptide components migrating toward the cathode at pH 4 and giving pos. color tests for hydroxamates after treatment with $HONH_2$ and ferric perchlorate spray reagents. Proline was present in these fractions and several others. An acidic peptide containing glutamic acid (N-terminal), glycine, and cysteic acid was isolated from a fraction adsorbed and eluted on and from Dowex-1 which also contained adenylic acid. Quant. anal. data on the composition of the many fractions are tabulated.

=> END
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LOGOFF? (Y)/N/HOLD:Y

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